1999

FLORIDA INTERNATIONAL UNIVERSITY

UNDERGRADUATE CATALOG

2000

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Florida International University

Member of the State University System
Miami, Florida

1999 – 2000 Undergraduate Catalog

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FIU and Florida International University are registered marks. Florida International University believes in equal opportunity practices which conform to all laws against discrimination and is committed to nondiscrimination with respect to race, color, creed, age, handicap, sex, marital status, or national origin. Additionally, the University is committed to the principle of taking the positive steps necessary, to achieve the equalization of educational and employment opportunities.

Note: The programs, policies, requirements, and regulations published in this catalog are continually subject to review in order to serve the needs of the University's various publics and to respond to the mandates of the Florida Board of Regents and the Florida Legislature. Changes in programs, policies, requirements, and regulations may be made without advance notice. The programs and courses listed in this catalog are still under review to meet the state mandated course leveling requirements of SB 2330. for additional information, please contact the academic department

This document was produced at an annual cost of $34,867 to $0.996 per copy to inform the public about University Programs. Fees given in this catalog are tentative pending legislative action.

ACADEMIC CALENDAR 1999-2000*

Fall Semester 1999

May 24	**Undergraduate Studies Advising for Fall 1999 term resumes.**
May 24	First day to apply for Fall 1999 term graduation.
May 28	Admission application priority consideration deadline (except international students).
July 6	Transfer Orientation (North Campus).
July 7 - 8	Freshman Orientation (University Park).
July 12 - 13	Freshman Orientation (University Park).
July 15 - 16	Freshman Orientation (North Campus).
July 15	Transfer Orientation (University Park).
July 22 - 23	Freshman Orientation (University Park).
July 30	Transfer Orientation (University Park).
July 26 - 30	***Registration Access Information available for Fall 1999 term.***
August 2 - 6	***Official Registration Week (Degree-Seeking Students only) by appointment time and day.***
August 9 - 13	***Open Registration.***
August 3 - 4	Freshman Orientation (North Campus).
August 5	Transfer Orientation (North Campus).
August 10	Transfer Orientation (University Park).
August 11 - 12	Freshman Orientation (University Park).
August 17	Transfer Orientation (North Campus).
August 17 - 18	Freshman Orientation (University Park).
August 18 - 19	Freshman Orientation (North Campus).
August 19	Transfer Orientation (University Park).
August 19 - 22	Housing check-in (All students, 9 am-8 p.m).
August 20	International Student Orientation (University Park & North Campus)
August 20	***Registration Resumes.***
August 20	***Last day to register without incurring a $100.00 late registration fee.***
August 23	**Classes begin.**
August 23 - 27	Short Term Tuition Loan Applications available for registering students.
August 23 - 27	**Registration for State Employees using fee waivers.**
August 27	**Last day (by 5 p.m.) to pay tuition and fees to avoid cancellation of enrollment.**
	Last day (by 5 p.m.) to complete late registration.
	Drop/Add Period ends at 5 p.m.
	Last day to change a grading option.
	Last day (by 5 p.m.) to drop courses or withdraw from the University without incurring a financial liability.
	Last day for students to apply and to sign Short Term Tuition Loan promissory notes and validate class schedules.
September 3	October 2nd CLAST exam registration deadline.
September 6	Labor Day Holiday (University Closed).
September 10	Last day (by 5 p.m.) to apply for graduation at the end of Fall 1999 term.
September 11 - 12	Rosh Hashanah**
September 17	Last day (by 5 p.m.) to withdraw from the University with a 25% refund of tuition.
September 20	**Undergraduate Studies Advising for Spring 2000 term begins.**
September 20	Yom Kippur**
October 1	Faculty Convocation.
October 2	CLAST Exam.
October 9– Dec 3	**Fall 1999 Mini-Term**
October 15	**Deadline (by 5 p.m.) to drop a course with a DR grade.**
	Deadline (by 5 p.m.) to withdraw from the University with a WI grade.
November 11	Veterans' Day Holiday (University Closed).
November 25 - 26	Thanksgiving Holiday (University Closed).
December 3	Classes end.
December 4 - 10	Official Examination Period.
December 13/14	Commencement Exercises.
December 15	Grades due.
December 17	Grades available to students by telephone, web and at kiosks.
December 25	Christmas Holiday (University Closed).

Spring Semester 2000

September 1	Last day for International Students to submit applications and all supporting documents for Spring term admission.
September 13	First day to apply for Spring 2000 term graduation.
September 24	Admission application priority consideration deadline (except international students).
November 4 - 5	Freshman Orientation (North Campus/University Park).
November 10	Transfer Orientation (University Park).
November 11	Veterans' Day Holiday (University Closed).
November 15 - 19	***Registration Information and Access Codes available for Spring 2000 term.***
November 20 - 24	***Official Registration Week (Degree-Seeking Students only) by appointment time and day.***
November 25 - 28	***Thanksgiving Holiday (University Closed). Telephone and Web Registration available.***
November 29 - Dec. 17	***Open Registration.***
January 1	New Year's Day (University Closed).
January 5	***Registration resumes***
January 7	***Last day to register without incurring a $100.00 late registration fee.***
January 7	International Student Orientation (University Park & North Campus).
January 7 - 9	Housing check-in 9 a.m. - 8 p.m.
January 10	**Classes begin.**
January 10 - 14	**Registration for State Employees using fee waivers.**
January 10 - 14	Short Term Tuition Loan Applications available for registering students.
January 14	**Last day (by 5 p.m.) to pay tuition and fees to avoid cancellation of enrollment.** Last day (by 5 p.m.) to complete late registration. Drop/Add Period ends at 5 p.m. Last day to change grading option. Last day (by 5 p.m.) to drop courses or withdraw from the University without incurring a financial liability. Last day for students to apply and to sign Short Term Tuition Loan promissory notes and validate class schedules.
January 17	Martin Luther King Holiday (University Closed).
January 18	Financial Aid Applications available for 2000-2001.
January 21	Last day (by 5 p.m.) to apply for Spring 2000 term graduation.
January 21	Last day to register for the February 19th CLAST exam.
January 31	**Undergraduate Studies Advising for Summer/Fall 2000 terms begins.**
February 4	Last day (by 5 p.m.) to withdraw from the University with a 25% refund of tuition.
Feb. 18 - April 21	**Spring 2000 Mini-Term**
February 19	CLAST exam.
March 3	**Last day (by 5 p.m.) to drop a course with a DR grade.** **Last day (by 5 p.m.) to withdraw from the University with a WI grade.**
March 20 - 24	Spring Break.
April 15	Classes End.
April 17 – 19, & 24 - 25	Official Examination Period.
April 20 - 21	Passover**
April 21	Good Friday**
April 26 - 27	Passover**
April 28	Commencement Exercises.
May 1	Grades due.
May 3	Grades available to students by telephone, web and at kiosks.

Complete Summer Semester 2000

February 1	Last day for International Students to submit applications and all supporting documents for Summer term admission.
February 25	Admission application priority consideration deadline (except international students).
April 4	Transfer Orientation (North Campus).
April 5	Transfer Orientation (University Park).
April 3 - 7	***Registration Information and Access Codes available for Summer 1999 term.***
April 10 - 14	***Official Registration Week (Degree-Seeking Students only) by appointment time and day.***
May 1 – 5	***Open Registration***
May 4	**International Student Housing Check In Only (12 noon to 8:00 p.m.)**
May 5	***Last day to register without incurring a $100.00 late registration fee.***
May 5	International Student Orientation (University Park/North Campus)
May 5	Last day to register for the June 3rd CLAST exam.
May 5 - 7	Housing Check-in 9 a.m. to 8 p.m. for Summer Term A.
May 8	**Classes begin.**
May 8 - 12	**Registration for State Employees using fee waivers.**
May 8 - 12	Short Term Tuition Loan Applications available for registering students.
May 12	**Last day (by 5 p.m.) to pay tuition and fees to avoid cancellation of enrollment.**
	Last day (by 5 p.m.) to complete late registration.
	Drop/Add Period ends at 5 p.m.
	Last day to change grading option.
	Last day (by 5 p.m.) to drop courses or withdraw from the University without incurring a financial liability.
	Last day for students to apply and to sign Short Term Tuition Loan promissory notes and validate class schedules.
May 26	Last day (by 5 p.m.) to apply for Summer 2000 graduation.
May 29	Memorial Day Holiday (University closed).
May 30	**Undergraduate Studies Advising for Fall 2000 term resumes.**
June 2	Last day (by 5 p.m.) to withdraw from the University with a 25% refund of tuition.
June 3	CLAST exam.
June 30	**Last day (by 5 p.m.) to drop a course with a DR grade.**
	Last day (by 5 p.m.) to withdraw from the University with a WI grade.
June 30	International Student Orientation (University Park & North Campus).
June 30 – July 2	Housing Check-in 9 a.m. to 8 p.m. for Summer Term B
July 4	Independence Day Observed (University Closed).
August 15	Classes end
August 18	Grades due.
August 23	Grades available to students by telephone, web and at kiosks.

Summer Term A

May 4	**International Student Housing Check In Only (12 noon to 8:00 p.m.)**
May 5	International Student Orientation (University Park/North Campus)
May 5	Last day to register for June 3rd CLAST exam.
May 5 - 7	Housing check-in 9 a.m to 8 p.m.
May 8	**Classes begin.**
May 8 - 12	**Registration for State Employees using fee waivers.**
May 12	**Last day (by 5 p.m.) to pay tuition and fees to avoid cancellation of enrollment.**
	Last day (by 5 p.m.) to complete late registration.
	Drop/Add Period ends at 5 p.m.
	Last day to change grading option.
	Last day (by 5 p.m.) to drop courses or withdraw from the University without incurring a financial liability.
May 29	Memorial Day Holiday (University closed).
June 2	**Last day (by 5 p.m.) to drop a course with a DR grade.**
	Last day (by 5 p.m.) to withdraw from the University with a WI grade.
	Last day (by 5 p.m.) to withdraw from the University with a 25% refund of tuition.
June 3	CLAST test.
June 23	Classes end.***
June 27	Grades due.

June 29	Summer Term A grades available to students via the web and at kiosks.
August 23	Final grades and GPA calculation available by telephone, web and at kiosks.

Summer Term B

June 14 - 15	Freshman Orientation (North Campus).
June 15 - 16	Freshmen Orientation (University Park).
June 19 - 30	***Summer Term B registration resumes***
June 19 – 20	Freshman Orientation (University Park/North Campus).
June 22 - 23	Freshmen Orientation (University Park/North Campus).
June 29	**International Student Housing Check In Only (12 noon to 8:00 p.m.)**
June 30	International Student Orientation (University Park/North Campus)
June 30	***Last day to register without incurring $100.00 late registration fee.***
June 30 – July 2	Housing Check-in 9 a.m. to 8 p.m. for Summer Term B.
July 3	**Classes begin.**
July 3 - 7	**Registration for State Employees using fee waivers.**
July 4	Independence Day Observed (University Closed).
July 6	**Last day (by 5 p.m.) to pay tuition and fees to avoid cancellation of enrollment.** Last day (by 5 p.m.) to complete late registration. Drop/Add Period ends at 5 p.m. Last day to change grading option. Last day (by 5 p.m.) to drop courses or withdraw from the University without incurring a financial liability.
July 28	**Last day (by 5 p.m.) to drop a course with a DR grade.** **Last day (by 5 p.m.) to withdraw from the University with a WI grade.** Last day (by 5 p.m.) to withdraw from the University with a 25% refund of tuition.
August 15	Classes end.
August 18	Grades due.
August 23	Grades available to students by telephone, web and at kiosks.
August 28	Fall semester classes begin.

*Calendar dates are subject to change. Please contact appropriate offices for verification and updates.

**No examinations or major quizzes may be given during the designated hours. Jewish holidays begin at 4 p.m. the day before the holiday and end at 7 p.m. the day of the holiday.

***Grades will be posted on transcripts. However, graduation will not be processed until the end of the Complete Summer Term, August 15.

General Information

State Board of Education

Jeb Bush *Governor*
Katherine Harris *Secretary of State*
Robert Butterworth *Attorney General*
Robert F. Milligan *Comptroller*
Bill Nelson *State Treasurer and Insurance Commissioner*
Bob Crawford *Commissioner of Agriculture*
Tom Gallagher *Commissioner of Education*

Florida Board of Regents

Dennis M. Ross *Chairman, Seminole*
Gwendolyn F. McLin *Vice Chairman, Okahumpka*
Andrea I. Anderson *Institutional Advancement, Ft. Myers*
Julian Bennett Jr. *Panama City*
Tom Gallagher *Commissioner of Education, Tallahassee*
Charlton B. Daniel, Jr. *Gainesville*
Adolfo Henriques *Miami*
James F. Heekin, Jr. *Orlando*
Philip D. Lewis *Riviera Beach*
Elizabeth G. Lindsay *Sarasota*
Jon C. Moyle *West Palm Beach*
Steven J. Uhlfelder *Tallahassee*
Welcom H. Watson *Fort Lauderdale*
Michelle C. Oyola *Student Regent, Florida Atlantic University*
Adam W. Herbert *Chancellor, State University System*

Executive Council

Modesto A. Maidique *President*
Mark B. Rosenberg *Provost and Executive Vice President for Academic Affairs*
Richard J. Correnti *Vice President for North Campus and Enrollment Services*
Paul D. Gallagher *Senior Vice President for Business and Finance*
Dale C. Webb *Acting Vice President for University Advancement*
Patricia Telles-Irvin *Acting Vice President for Student Affairs*
Mary L. Pankowski *Vice President for University Outreach and Intercollegiate Athletics and Chief of Staff of The Office of the President*
Steve Sauls *Vice President for University Relations*

History

Florida International University, a member institution of the State University System of Florida, was established by the State Legislature on June 22, 1965. Classes began at University Park on September 19, 1972, with nearly 6,000 students enrolled in upper-division undergraduate and graduate programs. In 1981 the University added lower division classes for freshmen and sophomores, expanding its enrollment capacity. In 1984, the University received authority to begin offering degree programs at the doctoral level; these programs received Level IV accreditation from the Southern Association of Colleges and Schools (SACS) in 1986.

The Florida Board of Regents appointed Charles E. Perry as the first president of FIU in July of 1969. He was succeeded in June, 1976 by President Harold Brian Crosby. Gregory Baker Wolfe was named the third president in February, 1979. Modesto A. (Mitch) Maidique was named the fourth President of Florida International University on August 27, 1986. Maidique received his Ph.D. in Electrical Engineering from the Massachusetts Institute of Technology and was associated with MIT, Harvard, and Stanford for 20 years.

University Mission

Florida International University (FIU) is an urban, multicampus, doctoral-granting institution located in Miami, Florida's largest population center with campuses at University Park and North Miami, selected programs offered in Davie and Fort Lauderdale, and off-campus continuing education programs. The mission of this state University is to serve the people of Southeast Florida, the state, the nation and the international community by imparting knowledge through excellent teaching, creating new knowledge through research, and fostering creativity and its expression.

Chartered by the Florida Legislature in 1965, the University opened its doors in 1972 to the largest entering class in United States collegiate history. With strong undergraduate programs centered around a rigorous liberal arts core curriculum, FIU now offers more than 200 baccalaureate, masters and doctoral degree programs through its many Colleges and Schools: Arts and Sciences, Business Administration, Urban and Public Affairs, Education, Engineering and Design, Health, Hospitality Management, Journalism and Mass Communication, and Nursing. The University's increasingly prominent art museum, its libraries, and specialized centers and institutes enhance these programs. The University continues to balance its programs for full and part-time degree-seeking students and to address the special needs of lifelong learners, traditionally and through distance learning. Campus life fosters a sense of community which provides for the intellectual, aesthetic, social, emotional, physical and moral development of students while providing opportunities for leadership training, awareness of cultural diversity, and a sensitivity to social issues and concerns.

Southeast Florida and FIU are alike in their explosive growth, rich ethnic and cultural diversity, and quest for excellence. FIU is a leading institution in one of the most dynamic, artistically expressive, and cosmopolitan cities in the United States, the gateway for Latin America and the Caribbean. The continued globalization of the world's economic, social and political systems adds to the importance of FIU's mission, and combines with our subtropical environment, and our strategic location to strengthen Southeast Florida's role as an information and transportation center.

From this unique setting we have derived five key strategic themes that guide the University's development: International, Environmental, Urban, Health, and Information. We focus on these themes with a commitment to quality management and cultural diversity. To summarize the University priorities: first, to graduate a well educated ethnically diverse student body by continuing to enhance our teaching and by broadening our graduate and professional programs; second, to promote research and creative activities by nurturing strategically selected disciplines which contribute to the social, artistic, cultural, economic, environmental and technological foundations for the 21st century; and third, to solve critical health, social, educational, and environmental problems through applied research and service. These strategic themes and priorities guide our pursuit of recognition as one of America's top 25 urban public research universities by the end of this century. (Approved by Florida Board of Regents, September 1993)

Goals

Florida International University (FIU), a comprehensive, multi-campus urban research institution, is committed to providing both excellence and access to all qualified students desiring to pursue higher education. FIU offers a comprehensive undergraduate liberal arts education structured around a rigorous core curriculum. The University also offers a number of highly-regarded master's and doctoral programs in six of its colleges and schools.

The University's academic programs are designed to achieve four major goals:

1. To provide an excellent university education for all qualified students, challenging and stimulating them at the lower-division level and preparing them to choose a major field in the upper division, leading to selection of a profession or occupation or further study at the graduate level. FIU encourages its graduates, as educated citizens, to pursue lifetime opportunities to contribute to the development of their community's cultural, aesthetic, and economic environments through participation.

2. To generate new knowledge through a vigorous and ambitious commitment to research in all academic disciplines and to encourage creativity by fostering an atmosphere conducive to the expression of ideas, artistic development, and communication with the external community.

3. To serve the university's external community, with special attention to Dade, Broward, and Monroe counties, enhancing South Florida's capacity to meet its cultural, economic, social and urban challenges as we move into the 21st century.

4. To foster greater global understanding as a major center of international education for the people of the Americas and the international community.

Campuses

The University operates two campuses in Dade County and two educational sites in Broward County.

The main campus is located at University Park in west Dade County, approximately 10 miles west of downtown Miami.

The North Campus is adjacent to Biscayne Bay, at Northeast Biscayne Boulevard and 151st Street.

The Broward County area is served cooperatively by FIU and FAU with locations on the campus of Broward Community College in Davie and the University Tower in downtown Fort Lauderdale. FIU also offers classes in South Dade on the Homestead campus of Miami-Dade Community College.

University Park

The University Park campus occupies 342 acres of land. Residence halls, the Golden Panther Sports Arena, the Library, an environmental preserve and other athletic facilities contribute to a pleasant collegiate atmosphere. The University has completed a $200 million construction program-the largest in its history. Construction has been completed on a $37.5 million five-floor addition to the Library, a $16 million Performing Arts Complex, and a $7.5 million College of Education building. The University also recently completed a new $10 million residence hall, a multi-million dollar expansion of the Graham University Center, a football and track stadium and a new baseball stadium. Recently, the National Hurricane Center moved its offices from Coral Gables to a $4 million facility on the University Park campus.

FIU also added a 38-acre urban research and training complex in West Dade known as the Center for Engineering and Applied Research.

North Campus

The North Campus of Florida International University educates more than 8,000 students on 200 acres on Biscayne Bay. Academic programs in Hospitality Management, Journalism and Mass Communication, Nursing, and Urban and Public Affairs are headquartered on the North Campus. In addition, degree programs in Arts and Sciences, Business Administration, Education, and Health are offered on the North Campus.

North Campus is the hub for FIU's community outreach efforts. It serves as the host campus to the Elders Institute, the HRS/Children and Families Professional Development Centre, the Institute of Government, the Institute for Public Opinion Research, the Roz and Cal Kovens Conference Center, and the Southeast Florida Center on Aging.

Students may apply for admission and financial aid, register for classes and receive academic advising at North Campus.

The North Campus is administered by the Vice President of North Campus and Enrollment Services. The office is on the Third Floor of the Library. Representatives from the Divisions of Academic Affairs, Business and Finance, Student Affairs and Public Affairs are also found there. Liaisons with personnel in other Divisions and at University Park are coordinated through North Campus Administration and Operations.

FIU Broward

FIU faculty and administrators provide a comprehensive university presence in Broward County in cooperation with Broward Community College (BCC) and Florida Atlantic University (FAU). FIU offers a select number of full degree programs and a variety of supplementary courses at two Broward locations.

Undergraduate and graduate programs are held at the Central Campus of BCC, which is located in Davie. In concert with BCC, a "2+2" program permits students to enroll at BCC for the first two years of study and then to transfer to FIU for the completion of their undergraduate work, receiving a bachelor's degree.

The University Tower in downtown Fort Lauderdale serves as the administrative headquarters for the FIU Broward Programs and as a major instructional facility. It is utilized for graduate programs, research, administrative offices, and services. Both FIU Broward facilities are staffed to provide support services such as academic advisement, admissions, registration, and student activities.

General Academic Information

Florida International University offers over 200 academic programs at the bachelor's, master's, and doctorate degree levels which are designed to respond to the changing needs of the growing metropolitan areas of South Florida. Degree programs are offered in the College of Arts and Sciences, College of Business Administration, College of Education, College of Engineering and Design, College of Health Sciences, School of Hospitality Management, School of Journalism and Mass Communication, and College of Urban and Public Affairs.

In 1995, *U.S News & World Report* magazine ranked FIU as one of the top 150 national universities in the country in the annual survey of "America's Best Colleges." The magazine had previously recognized the University as a "best buy" in higher education. In addition, FIU was named one of the best ten public commuter colleges in

the U.S. in "Money Guide", an annual report by *Money* magazine.

Accreditation and Memberships

All academic programs of the University are approved by the State Board of Education and the Florida Board of Regents. The University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia, telephone number 404-679-4501) to award the baccalaureate, masters and doctoral degrees. The professional programs of the respective schools of the University are accredited or approved by the appropriate professional associations, or are pursuing full professional accreditation or approval.

The University is also an affiliate member of the Association of Upper Level Colleges and Universities, the American Association of State Colleges and Universities, the Florida Association of Colleges and Universities, the American Association of Community and Junior Colleges, National Association of Land-Grant Colleges, a Charter Member of the Southeast Florida Educational Consortium, and numerous other educational and professional associations. The following agencies have accredited professional programs at the University:

Accreditation Board for Engineering and Technology
Accrediting Commission on Education for Health Services Administration
Accrediting Council on Education in Journalism and Mass Communications
American Assembly of Collegiate Schools of Business
American Association of Colleges of Teacher Education
American Association of Museums
American Chemical Society
American Council of Construction Education
American Dietetics Association
American Health Information Management Association
American Occupational Therapy Association
American Physical Therapy Association
American Society of Clinical Pathologists
Computer Science Accreditation Commission
Commission for the Accreditation of Allied Health Education
Council of Graduate Schools in the United States
Council on Education for Public Health
Florida Consortium on Multilingual and Multicultural Education
Florida State Board of Nursing
Landscape Architecture Accreditation Board (LAAB) of the American Society of Landscape Architecture (ASLA)
National Accrediting Agency for Clinical Laboratory Sciences
National Association of Colleges of Nursing
National Association of Schools of Music
National Association of Schools of Public Affairs
National Council for Accreditation of Teacher Education
National League of Nursing
Council on Social Work Education

Southeast Florida Educational Consortium

Florida International University, Broward Community College, and Miami-Dade Community College are charter members of the Southeast Florida Educational Consortium, which was established in 1977. This organization links the member institutions in planning, maintaining, and evaluating cooperative efforts in academic programs, student services, and administrative support services. The overall objectives of the Consortium are to:

1. Increase and improve educational opportunities.
2. Ensure smooth transition from the community college to the university.
3. Provide easy access to institutional services for students and faculty.
4. Effectively utilize human and fiscal resources.

Descriptions of specific cooperative arrangements between the Consortium member campuses and student and faculty procedures are given in the appropriate sections of this Catalog.

Academic Programs

School of Architecture

Bachelor of Design in Architectural Studies
Bachelor of Science in Interior Design

College of Arts and Sciences

Bachelor of Arts in:
- Chemistry
- Dance
- Economics
- English
- Environmental Studies
- French
- Geology
- History
- Humanities
- International Relations
- Liberal Studies
- Philosophy
- Political Science
- Portuguese
- Psychology
- Religious Studies
- Sociology/Anthropology
- Spanish
- Theatre
- Women's Studies

Bachelor of Fine Arts in:
- Art
- Theatre

Bachelor of Music
Bachelor of Science in:
- Biological Science
- Chemistry
- Computer Science
- Environmental Studies
- Geology
- Mathematics
- Mathematical Sciences
- Physics
- Statistics

College of Business Administration

Bachelor of Accounting
Bachelor of Business Administration with majors in:
- Finance
- International Business
- Management
- Management Information Systems
- Marketing
- Personnel Management

College of Education

Bachelor of Science in:
- Art Education
- Biology Education
- Chemistry Education

Elementary Education
Emotional Disturbance (with a track in Varying Exceptionalities)
English Education
Health Education (with a track in Exercise Physiology)
Health Occupations Education
Home Economics Education
Mathematics Education
Mental Retardation (with a track in Varying Exceptionalities)
Modern Languages Education (majors in French and Spanish)
Music Education
Parks and Recreation Management (with specializations in Leisure Service Management, Parks Management, and Recreational Therapy)
Physical Education (programs in grades K-8 and grades 6-12)
Social Studies Education
Specific Learning Disabilities, (with a track in Varying Exceptionalities)
Vocational Education (major in Vocational Industrial Education and a track in Organizational Training)

College of Engineering

Bachelor of Science in:
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Construction Management
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering

College of Health Sciences

Bachelor of Science in:
- Dietetics and Nutrition
- Health Information Management
- Medical Technology
- Nursing
- Occupational Therapy
- Physical Therapy

School of Hospitality Management

Bachelor of Science in Hospitality Management

School of Journalism and Mass Communication

Bachelor of Science in Communication

College of Urban and Public Affairs

Bachelor of Science in:
- Criminal Justice
- Social Work

Bachelor of Health Services Administration
Bachelor of Public Administration

North Campus Programs

College of Arts and Sciences

Bachelor of Arts in:
- English
- Humanities
- History
- International Relations
- Political Science
- Psychology
- Sociology/Anthropology
- Visual Arts

College of Business Administration

Bachelor of Business Administration with a major in:
Marketing

College of Education

Foundations courses
FOCUS Program

College of Health Sciences

Bachelor of Science in:
- Health Information Management
- Nursing

School of Hospitality Management

Bachelor of Science in Hospitality Management

School of Journalism and Mass Communication

Bachelor of Science in Communication

College of Urban and Public Affairs

Bachelor of Science in:
- Criminal Justice
- Social Work

Bachelor of Health Services Administration
Bachelor of Public Administration

Broward County Programs

College of Education

Courses for Teacher Education
Courses in Vocational Education

College of Engineering

Bachelor of Science in Construction Management (BC)

College of Heath Sciences

Bachelor of Science in Nursing (RN to BSN) (BC)

School of Hospitality Management

Bachelor of Science in Hospitality Management - (BC)

Primary Location:

Broward Program on BCC Central Campus - Davie
Askew University Tower - Fort Lauderdale

Minors

A minor program is an arrangement of courses enabling a student to develop a degree of expertise and knowledge in an area of study in addition to his or her major academic program of study.

To receive a minor, a student must also complete the requirements for a baccalaureate degree from the University. A minor is not interdisciplinary.

College of Arts and Sciences

Art History
Biology
Chemistry
Computer Science
Dance
Economics
English
French Language and Culture
General Translation Studies
Geology
Geography
History
Humanities
International Relations
Mathematical Sciences
Mathematics
Music
Philosophy
Physics
Political Science
Portuguese
Psychology
Religious Studies
Sociology/Anthropology
Spanish Language and Culture
Statistics
Theatre
Visual Arts

College of Business Administration

(for non-Business majors only)
Business
Entrepreneurship

College of Health Sciences

Medical Laboratory Sciences
Nutrition

School of Hospitality Management

Hotel/Lodging Management
Restaurant/Food Service Management
Travel/Tourism Management

School of Journalism and Mass Communication

Advertising
Journalism
Mass Communication
Public Relations
Television

College of Urban and Public Affairs

Criminal Justice
Health Services Administration
Public Administration
Social Welfare

Certificates

Certificate Programs are structured combinations of courses with a common base of interest from one or more disciplines into an area of concentration.

Successful completion of a Certificate Program is entered on the student's transcript and records. Two types of certificates are awarded:

Academic Certificate

Awarded by an academic unit to a student at the time of awarding a bachelor's degree; or upon completion of the appropriate coursework to a student who already has a bachelor's degree.

An academic certificate shall not be awarded to a student who does not possess either a bachelor's degree or does not complete a bachelor's degree program. An academic certificate is to be interdisciplinary in nature, to the greatest extent possible.

Professional Certificate

Awarded by an academic unit to an individual who completes the appropriate coursework in the area of concentration. The professional certificate does not need to be interdisciplinary or associated with a degree program.

For details and course requirements, refer to the appropriate section in each College or School.

College of Arts and Sciences

Academic Certificates in:

Actuarial Studies
African-New World Studies
American Studies
Asian Studies
Brazil Studies
Comparative Immunology
Consumer Affairs
Cuban and Cuban-American Studies
Environmental Studies
Ethnic Studies
Forensic Science
Gerontological Studies
International Studies
Judaic Studies
Labor Studies
Latin American and Caribbean Studies
Law, Ethics and Society
Linguistic Studies
MERCOSUR
Public Policy Studies
Western Social and Political Thought
Women's Studies

Professional Certificates in:

Labor Studies and Labor Relations
Legal Translation and Court Interpreting
Professional Language
Translation Studies
Tropical Commercial Botany

College of Business Administration

Banking
International Bank Management
Marketing

College of Education

The College offers a variety of Professional Certificate and Add-On Teacher Certification programs. Refer to the College of Education program listing section.

College of Engineering

Professional Certificate in:
Heating, Ventilation, and A/C Design

College of Health Sciences

Clinical Chemistry
Clinical and Medical Microbiology
Haematology
Immunohaematology
Medical Record Coding

School of Hospitality Management

Foodservice Management
Lodging Management
Travel and Tourism Management

School of Journalism and Mass Communication

Professional Certificates in:
- Integrated Communications: Advertising and Public Relations
- Media Management
- Spanish Language Journalism
- Student Media Advising
- Television Production

College of Urban and Public Affairs

Academic Certificate in Law and Criminal Justice
Urban Affairs

Evening and Weekend Degree Programs

College of Arts and Sciences

Bachelor of Arts in:
- Economics
- English
- Liberal Studies
- Political Science
- Psychology
- Sociology/Anthropology
- Spanish

Bachelor of Science in:
- Computer Science

College of Business Administration

- Bachelor of Accounting
- Bachelor of Business Administration

College of Engineering

Bachelor of Science in:
- Computer Engineering
- Construction Management
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering

College of Health Sciences

Bachelor of Science in Nursing

School of Hospitality Management

Bachelor of Science in Hospitality Management

School of Journalism and Mass Communication

Bachelor of Science in Communication

College of Urban and Public Affairs

Bachelor of Science in Criminal Justice
Bachelor of Health Services Administration
Bachelor of Public Administration

For more information, call the Office of Adult and Student Information Services (OASIS) at (305) 919-5669; or the appropriate college or school.

Office of Admissions

Florida International University encourages applications from qualified applicants without regard to sex, physical handicap, cultural, racial, religious, or ethnic background or association.

Application Process

Students interested in applying can do so via the following methods:

Application Validation

Students applying from Florida public high schools, colleges, or universities should send their transcripts electronically to FIU to begin their admissions process. Admissions will mail an *Application Validation* form for completion and return.

Online Application

Students with Internet access can apply online by visiting FIU's website at www.fiu.edu/orgs/admiss for application and instructions.

State University System of Florida Application for Admission

Students from private schools or non-Florida institutions should complete and submit a *State University System of Florida Application for Admission*. As part of the State University System of Florida (SUS), FIU makes this common application form available for undergraduates. It can be requested from the Office of Admissions at University Park, Charles E. Perry Building, Room 140, Miami, Florida 33199 (305) 348-2363. The application is also available in the guidance/advisement offices of Florida public high schools and universities.

All credentials and documents submitted to the Office of Admissions become the property of Florida International University. Originals will not be returned to the applicant or forwarded to another institution. A $20.00 non-refundable application fee (U.S. Dollars) made payable to Florida International University must accompany all forms of application. In addition, the following credentials are required:

Freshman Applicants

1. Official secondary school transcripts and appropriate test scores: Scholastic Aptitude Test (SAT) or the American College Test (ACT).

Applicants whose native language is not English and have not taken any college level English courses, must present a minimum score of 500 in the Test of English as a Foreign Language (TOEFL), or a minimum of 3 on the Advanced Placement International English Language Examination (APIEL).

All official transcripts, test scores, and any other required credentials must be received directly from the issuing agencies. It is the applicant's responsibility to initiate the request for credentials to the issuing agencies and to assure their receipt by the Office of Admissions.

2. Proof of graduation from an accredited secondary school must be submitted.

3. Nineteen academic units in college preparatory courses are required as follows:

English	4
Mathematics	3
Natural Science	3
Social Science	3
Foreign Language[1]	2
Academic Electives[2]	4

[1]Two units in the same foreign language are required.

[2]Academic Electives are from the fields of mathematics, English, natural science, social science, and a foreign language. The academic grade point average will be computed only on the units listed above. Grades in honors courses, International Baccalaureate (IB), and advanced placement (AP) courses will be given additional weight.

Freshman admission decisions are made based on the student's strong academic preparation. Competition for places in the freshman class is created by the quality and extent of the applicant pool.

Applicants who do not meet the above criteria will be reviewed by the Admissions Review Committee. Those who show potential in areas not easily evaluated by standardized tests can be considered for admission under the exception rule.

Students who are applying to majors in Theatre, Music, and Dance, in addition to meeting university academic standards, must meet the approval of the respective department through an audition. Contact the department for audition dates.

Transfer Applicants

Degree seeking applicants with fewer than 60 semester hours of transfer credits must meet the same requirements as beginning freshmen. In addition, they must demonstrate satisfactory performance in their college work.

Applicants who receive an Associate in Arts (A.A.) degree from a Florida Public Community College or State University in Florida, will be considered for admission without restriction except for published Limited Access Programs within the University.

All other applicants from Florida Public Community Colleges or State Universities in Florida who do not hold an Associate in Arts degree (A.A.) must have completed 60 semester hours of transferable credit, have a minimum grade point average of 2.0, and must present College Level Academic Skills Tests (CLAST) scores before admission can be granted.

Students transferring from independent Florida and out-of-state colleges into the University's upper division must have maintained a minimum 2.00 grade point average based upon a 4.00 scale.

Coursework transferred or accepted for credit toward an undergraduate degree must be completed at an institution accredited as degree-granting by a regional accrediting body for higher education at the time the coursework was completed. Each academic department . will review transfer credits to determine if they meet program requirements and reserves the right to accept or reject those credits. Students must contact their academic department to obtain any additional requirements needed for their program of study.

All applicants must meet the criteria published for Limited Access Programs and should consult the specific college and major for requirements.

Applicants who meet the above admissions requirements, but have not completed the general education requirements, or the prerequisites of their proposed major, may complete this college work at FIU, or at any other accredited institution. Students may also fulfill general education requirements through the College Level Examination Program (CLEP).

Official transcripts from all previous post secondary institutions must be forwarded to the Office of Admissions.

Students are responsible to initiate this request.

Transfer applicants from a state community college are encouraged to review the current edition of FIU's transfer student counseling manual available in all of Florida's community colleges counseling offices.

All students seeking admission to the University regardless of whether the student holds an A.A., must have completed two years of credit in one foreign language at the high school level or 8-10 credits in one foreign language at the college level (American Sign Language is acceptable). If a student is admitted to the University without this requirement, the credits must be completed prior to graduation.

Students who can demonstrate continuous enrollment in a degree program at an SUS institution or Florida Community College since Fall Term, 1989 (continuous enrollment is defined by the state to be the completion of at least one course per academic year) can be exempt from this requirement.

Students holding an A.A. degree from a Florida Community College or SUS institution prior to Fall Term, 1989 will also be exempt.

Students who are applying to majors in Theatre, Music, and Dance, in addition to meeting university academic standards, must meet the approval of the respective department through an audition. Contact the department for audition dates.

Applicants whose native language is not English and have not taken any college level English courses, must present a minimum score of 500 in the Test of English as a Foreign Language (TOEFL).

Admission decisions will not be made before a completed application and all supporting documents are on file in the Office of Admissions.

Applications are kept on file for one year from the anticipated entrance date.

All credentials and documents submitted to the Office of Admissions become the property of Florida International University. Originals or copies of the originals will not be returned to the applicant or forwarded to another institution, agency, or person.

Admission to the University is a selective process and satisfying the general requirements does not guarantee acceptance.

Limited Access Programs

A limited access program utilizes selective admission to limit program enrollment. Limited access status is justified where student demand exceeds available resources, such as faculty, instructional facilities, equipment, or specific accrediting requirements. Criteria for selective admission includes indicators of ability, performance, creativity or talent to complete required work within the program. Florida Community College transfer students with Associate in Arts degrees are given equal consideration with FIU students. Admission to such programs is governed by the Articulation Agreement and the State of Florida Board of Regents rules.

The following programs have been designated as limited access:

Dietetics and Nutrition
Medical Technology
Nursing
Occupational Therapy
Physical Therapy

Requirements for Admission to Undergraduate Teacher Education Programs

In the College of Education, all applicants for teacher education programs must score at or above the 40th percentile on a standardized college entrance test, (i.e., a total score of 960 or higher on the SAT, or a composite score of 20 or higher on the ACT). It is possible for an applicant who fails to meet this criterion to appeal to the College of Education.

Priority Consideration

Application Dates

Summer

February 1 - Last day for international students to submit applications and all supporting documents for Summer Term.

Last day to submit applications for Summer Term.

Fall

April 1 - Last day for international students to submit applications and all supporting documents for Fall Term.

Last day to submit applications for Fall Term.

Spring

September 1 - Last day for international students to submit applications and all supporting documents for Spring Term.

Last day to submit applications for Spring Term.

International Students: If the application and documents are not received by the deadline date, the application for admission will have to be considered for the following term.

International Admissions

International student applicants must meet the admission requirements of the University as described in the previous sections and comply with the following:

Academic Records

Official transcripts, diplomas and/or certificates must be sent directly from each previous institution to the Office of Admissions. Documents in a language other than English must be translated by an official translation agency. Notarized translations are not acceptable.

All credentials and documents submitted to the Office of Admissions become the property of Florida International University. Originals or copies of originals will not be returned to the applicant or forwarded to another institution, agency or person.

Proficiency in English

Applicants who hold an undergraduate or graduate degree from an institution within the United States or other English speaking countries are not required to submit TOEFL.

Declaration and Certification of Finances

Upon receipt of the application for admission, the Declaration and Certification of Finances will be mailed to the applicant. It must be completed and returned to the Office of Admissions. A Certificate of Eligibility (Form I-20A) will be issued once the applicant has been found admissible to the University.

The University is required by immigration authorities to check carefully the financial resources of each applicant prior to issuing the Form I-20A. Therefore, it is important that applicants are aware of the cost of attending the University and have the necessary support funds for the period of enrollment. Applicants should refer to the Annual Estimate of Cost Chart.

The total funds available for the student for the first or second academic year, or both, must equal the total estimate of institutional costs and living expenses. All items in the Declaration and Certification of Finances must be accurately answered to avoid unnecessary delay in processing. This document along with proof of sufficient funds must be received by the Office of Admissions

two months prior to the anticipated entry date.

Refer to the Annual Estimate of Cost table for more information. A married student should plan on an additional $5,000 in costs to cover the living expenses of a spouse.

A couple with children should anticipate further yearly additional costs of no less than $3,000 for each child.

Medical Insurance

The State of Florida requires that all international students maintain health insurance coverage to help defray the costs in case of catastrophic medical emergency. The policy must provide specific levels of coverage which have been established to ensure that the policy is adequate to provide for costs at U.S. hospitals, usually much higher than costs in many other parts of the world. In addition, a policy must have a claims agent in the United States who may be contacted by medical providers and who facilitates prompt payment of claims. The University has approved a plan which meets the state requirements and which meets the needs of most students; however, a student on F status may select alternate coverage provided it meets the state requirements for minimal coverage. A copy of these requirements is available from International Student and Scholar Services. Students are advised not to purchase insurance policies prior to arrival without verifying that the policies meet FIU/SUS requirements. Students in J status are required by the United States Information Agency to maintain health insurance coverage for themselves and their dependents for the full length of their program. Florida International University requires students on J status sponsored by FIU to purchase the University approved medical insurance plan for themselves and their dependents. Compliance with the insurance regulation is required prior to registration.

Required Entrance Tests

All freshman applicants are required to submit the results of the Scholastic Aptitude Test (SAT) or the American College Test (ACT).

Tuition

An international student is considered a non-resident and is assessed non-resident fees. Immigration regulations require an international student to attend school each fall and spring semester at least two semesters within an academic year. An undergraduate student is required to take a minimum of twelve credit hours per semester. Please refer to the section on Student Fees and Student Accounts for more information.

Full-Time Enrollment

Non-immigrant alien students in F-1 visa status are required by United States immigration regulations to be enrolled full-time, except for the summer terms, and to make satisfactory progress toward the degree program in each term; otherwise the student's immigration status may be jeopardized. Full-time enrollment is defined as enrollment every term for a minimum of 12 semester hours (undergraduate), or nine semester hours (graduate).

The laws and regulations of the United States Department of Justice, Immigration and Naturalization Service state:

It is the student's responsibility to comply with all non-immigrant alien requirements as stated under the United States laws under Section 101(a)(15)(f)(i) of the Immigration and Nationality Act.

Granting official Extension of Stay is dependent upon the student's achieving normal academic progress toward the degree requirements.

Employment

The legal regulations governing F-1 student employment are complex, and advisors are available at International Student and Scholar Services to explain these regulations. International students must check with this office before engaging in any type of employment, either paid or unpaid. In general, however, employment is available only to students who maintain their legal status in the U.S. and is regulated under three categories:

a) on-campus employment: F-1 students may be employed on the FIU campus for a maximum of 20 hours per week during fall and spring semesters while school is in session, and full time during holidays, vacations, and summer. On-campus employment includes teaching and research assistantships for graduate students and hourly part time work. Students must contact individual campus departments to inquire about employment opportunities.

b) off-campus employment: F-1 students may request off-campus employment under very limited conditions and only after maintaining F-1 status for at least one full academic year. Off-campus employment opportunities are not readily available, and students should not rely on off-campus employment as a source of income to finance their studies.

c) Practical training: F-1 students may request practical training employment to accept jobs related to their studies. Students usually pursue practical training employment after completion of degree requirements, although in some cases practical training may be authorized prior to completion of studies. Since practical training employment is limited to one year of full-time employment, students cannot rely on it as a source of income to finance their studies.

Note: An international student will not be granted admission to the University until all academic and non-academic requirements have been met. Under no circumstances should a student come to the University without having received the official Letter of Admission and the I-20A Form. All correspondence and document submissions should be directed to: Office of Admissions, Florida International University, PC 140, University Park, Miami, Florida 33199 U.S.A.

Scholarships

FIU recognizes students who are academically, artistically, and athletically talented. The University awards full and partial academic scholarships.

Advising for Major Fellowships

Counseling by designated faculty is available for students interested in applying for Churchill, Deutscher Akademischer Austauschdienst, Fulbright, Goldwater, Hertz, Luce, Marshall, Mellon, National Science Foundation, Rhodes, Rotary, and Truman scholarships or fellowships. All are awarded through national competition. Applications are made early in the fall of the senior year, except for Rotary fellowships, which are available for any year, Goldwater scholarships, which are only for sophomores, and Truman scholarships, which are only for juniors. Further information and the names of the designated faculty for each award are available from Undergraduate Studies at DM 368, (305) 348-2099.

National Merit/Achievement Scholarship Program

Florida International University recognizes the academic talent of students who are selected as National Merit and National Achievement Finalists by the National Merit Scholarship Corporation. National Merit/Achievement Scholarship packages are worth up to $20,000 for four consecutive years at the University. Semifinalists also qualify for scholarships up to $12,000 for four consecutive years.

National Hispanic Scholarship

Outstanding Hispanic students who are recognized by the College Board as National Hispanic Scholars are eligible for the University's National Hispanic Award. The award is worth up to $20,000 for four consecutive years at the University. Honorable Mention recipients also qualify for partial scholarships.

Faculty Scholars Scholarships

Outstanding entering freshmen are selected each year to receive Faculty Scholars Scholarship awards.
To meet the eligibility criteria, applicants must have:

1. Outstanding high school performance; a minimum academic average of 3.5 in a college preparatory curriculum in high school.
2. A total score of 1270 on the SAT or a composite score of 28 on the ACT.

University Scholars Scholarship

High school seniors with a 3.50 GPA and commensurate SAT or ACT scores may be eligible to receive the University Scholars Scholarship. This scholarship is a partial tuition award and may be renewed annually.

Valedictorian and Salutatorian Scholarships

In recognition of high school seniors who graduate first or second in their class, the University offers the Valedictorian and Salutatorian Acholarships. Valedictorians who graduate from regionally accredited high schools may receive up to $2,000. Salutatorians may receive up to $1,000. These scholarships are awarded for the freshman year only. To qualify, students must request that their high school counselor submit an official letter to the Director of Admissions confirming class rank.

Bright Futures Scholarship Program

Florida high school seniors may qualify for one of the following scholarships from the Florida Department of Education:

- **Florida Merit Scholars:** students with a 3.0 GPA and a 970 SAT or 20 ACT receive a package with up to 75% of tuition and fees.
- **Florida Academic Scholars:** students with a 3.5 GPA and a 1,270 SAT or 28 ACT of can earn a full tuition scholarship and a $600 book stipend.
- **Florida Gold Seal Vocational Scholars:** students who complete a two-year vocational or technical program with a 3.0 GPA overall and 3.5 GPA in vocational courses, can earn a scholarship worth up to 75% of tuition.

Transfer Academic Scholarships

Transfer students who would like to be considered for academic scholarships must apply through the Honors College. Student with at least a 3.3 in prior college work can apply at the sophomore or junior level. Scholarship recipients are selected on the basis of their transfer GPA (with special attention paid to performance in honors courses), extra-curricular activities, and letters of recommendation. All scholarship recipients must be members of the Honors College and maintain full-time enrollment.
For more detailed information on these scholarships, applicants should contact the Office of Admissions, PC 140 - University Park, (305) 348-2363.

Readmission

An admitted degree-seeking student who has not enrolled in any course at the University for one full academic year or more is eligible for readmission. The student must meet the University and program regulations in effect at the time of readmission. Students must contact the Office of Admissions to apply for readmission.

Undergraduate Academic Amnesty

Effective Fall 1998 FIU undergraduate students who have not been enrolled in any university or college for at least six calendar years may apply for academic amnesty. If re-admitted, students will begin with a new grade point average of 0.0. No grades previously earned will be included in the University grade point average, however, credit for previous University courses, in which a grade of "C" or better was earned may be applied toward a degree, subject to determination by the College of the student's major. All prior courses attempted and grades received will be on the student's transcript. Admitted students may not petition for any retroactive change in their academic record. Students applying for academic amnesty to a limited access program, must meet the admission criteria of the program. Students must follow the regular readmission application process and complete the amnesty form for consideration to be determined by the sstudent's academic dean.

Undergraduate Academic Salvage

Effective Fall 1998 FIU undergraduate students who are academically dismissed from the University or who have a GPA below a 2.0, and who subsequently receive an Associate of Arts degree from another Florida public institution of higher learning, if readmitted to FIU will have their grade point average calculated again. Students readmitted under Academic Salvage will be credited with a maximum of 60 semester credit hours. Students must follow the regular readmission application process and complete the Salvage form for consideration to be determined by the student's academic dean.

Student Right-to-Know Safety and Security Act

Under the Student Right-to-Know and Campus Security Act, Florida International University will, upon request, make available to students and potential students the completion or graduation rates of certificate or full-time degree-seeking students for a one-year period. Also available, upon request, are University policies regarding a) procedures for reporting criminal actions or other emergencies, b) access to campus facilities, c) campus law enforcement, d) crime prevention programs, e) statistics concerning arrests and the occurrence on campus of certain criminal offenses, f) criminal activity of off-campus student organizations, and the use, possession, and sale of illegal drugs or alcohol.

Annual Estimate of Costs for Undergraduate International Students

Single Student (30 semester hrs)

Tuition and Fees[1]	$ 8,808
Maintenance[2]	$ 7,960
Books & Supplies	$ 904
Medical Supplies	$ 576
Total	$ 18,248

[1]*Tuition and fees are subject to change.* Fees include the Student Health Fee ($72 per semester) and the Athletic Fee ($20.00 per semester). Amounts shown reflect 15 semester hours of undergraduate Fall and Spring terms only.

[2]Maintenance is estimated at $884.00 per month to cover room, board, clothing, transportation, and incidentals. This cost is for nine months.

[3]All international students are required to carry medical insurance.

Undergraduate Studies

Academic Advising Center

Academic advising of students with fewer than 36 semester hours of earned credit is the responsibility of the Academic Advising Center in Undergraduate Studies. When admitted to the University, the student will meet with an advisor who will help plan the student's academic program. At the completion of 30 semester hours of earned credits, the student can choose an intended major, and after 60 semester hours, a student should officially declare a major. Students with intended or declared majors will be advised by faculty members or professional advisors in their major department.

Before students are cleared to register for classes they are required to participate in an academic advising session or see an advisor in the Advising Center each semester.

Academic information is available in PC 249, University Park, and ACI-180, North Campus.

English and Math Placement

All freshmen entering the University are required to complete placement tests prior to advising and registration. Tests are offered at orientation the semester before attending the University. The Freshman Testing/Placement Program includes computational skills and standards of written English.

Newly admitted sophomore transfer students with fewer than 36 credits who have not met the Core Curriculum requirements in mathematics or English must participate in the Freshman Testing/Placement Program or demonstrate satisfactory completion of equivalent courses and participate in advising sessions before they will be allowed to register for English or math courses at the University.

CLAST

The College-Level Academic Skills Test is part of Florida's system of education accountability that satisfies the mandates of Section 229.551(3)(i), Florida Statutes. The CLAST is an achievement test that measures students' attainment of the college-level communication and mathematics skills that were identified by the faculties of community colleges and state universities.

Since August 1, 1984, students in public institutions in Florida have been required to pass the four sub-tests of the CLAST for the award of an Associate in Arts degree, for admission to upper-division status and the award of a Bachelor's degree in a state university in Florida. There are two exceptions to this rule: 1) anyone seeking an undergraduate degree from a Florida institution and who already has earned an accredited Bachelor's degree; 2) anyone awarded an Associate of Arts degree from a Florida Institution before September 1, 1982, and admitted to upper-level status at a Florida Institution before August 1, 1984, is not required to take the CLAST.

The State Board of Education and the Florida Statutes provide special consideration for students in public institutions who have a **specific learning disability** such that they cannot successfully complete one or more CLAST sub-tests. These students may appeal to an institutional committee for a waiver of the requirement to pass any applicable sub-test(s) of the CLAST.

The State Board of Education and the Florida Statutes permit an institution president, under certain conditions, to grant a waiver from one or more of the CLAST sub-tests to **students who repeatedly (at least four times) fail** the sub-test(s) for which a waiver is requested. Before such a waiver may be approved by an institution president, the waiver must first have been recommended by a majority vote of the institutional committee established to review waiver requests.

The 1997 Legislature and the State Board of Education approved the following conditions under which **any student may be exempt from the CLAST** if the student fulfills one or more of the following requirements before completion of the undergraduate degree program. All exemptions are processed by the Registrar's Office.

Alternative based on the SAT I or EACT scores (or the equivalent scores on the original SAT and ACT score scales). An SAT I score of 500 on the Verbal section qualifies for an exemption for the essay, English language skills, and reading sub-tests; and a score of 500 on the Computation section qualifies for an exemption for the Mathematics sub-test. An EACT score of 21 on the Mathematics section qualifies for an exemption for the Mathematics sub-test; a score of 22 on the Reading section qualifies for an exemption for the Reading sub-test; and a score of 21 on the English qualifies for an exemption for the English language skills and Essay sub-tests.

Alternative based on the students' GPA. To exempt the English language skills, reading, and essay sections of the College-Level Academic Skills Test, the student must have earned a 2.5 grade point average in two courses for a minimum of six semester hours of credit from ENC 1101, English I and ENC 1102, English II or other equivalent college-level English courses. To exempt the Mathematics section of the College-Level Academic Skills Test, the student must have earned a 2.5 grade point average in two courses for a minimum of six semester hours of credit from:

Option 1- MAC 1102 or any other MAC course with the last three digits higher than 102;
MGF 102 or any other MGF course with the last three digits higher than 202;
STA 1014 or any other STA course

Option 2- MGF 1113 Topics in College Mathematics I
MGF 1114 Topics in College Mathematics II
MGF 1118 Mathematics CLAST Review

Option 3- MGF 1113 Topics in College Mathematics I and MAC 1102 College Algebra

The College-Level Academic Skills Test is also available as a computer assisted test, the **CAT CLAST**, for the reading, English language skills, and mathematics sub-tests for re-take examinees only. The CAT CLAST is offered at certain regional centers and FIU students can be authorized in the Testing Office to take one or more sections of the CLAST on the computer. No authorizations will be given one month prior to the regularly scheduled written test.

University Learning Center

The University Learning Center is made up of academic assistance labs equipped to help students improve their academic skills. Included among these skills are reading, writing, English, mathematics, statistics, and personal study skills. Special emphasis is given to those students who need or want assistance passing the College-Level Academic Skills Test (CLAST) and other institutional or national tests.

Testing

The University Testing Office is a department in the Office of Undergraduate Studies which provides information and administers undergraduate and graduate admission tests, institutional tests, and the College-Level Academic Skills Test (CLAST). Information on post-secondary tests is available on the test information telephone line at (305) 348-2441.

The Academy for the Art of Teaching

The Academy for the Art of Teaching is a department of Undergraduate Studies and is dedicated to supporting and advancing the quality of classroom teaching mission of FIU. It serves both as a resource to the teaching community—faculty, adjuncts, and graduate teaching assistants—and a source for proactive programming focused on enhancing approaches, methodologies and practices of teaching.

Through workshops, individual and departmental consultations, mini grants for research and development and information dissemination, as well as collaborative programs with other FIU agencies such as the Library, Instructional Technology, and the Graduate Students Association, the Academy reaches out to all those who teach at FIU. Information and assistance can be obtained from the Director of the Academy at AT 120W or (305) 348-4214/3907.

Core Curriculum Requirements

The Core Curriculum requirements apply to all students entering the University with fewer than 36 semester hours. Students transferring with 36 semester hours or more must fulfill the University's General Education Requirements. All students subject to the Core are informed of additional policies governing these requirements in mandatory academic advising sessions provided by the Academic Advising Center of Undergraduate Studies (University Park PC 249, North Campus ACI-180):

Freshman Experience (one course required)

SLS 1501	Freshman Experience Course

English Composition (two courses required 'C' or higher required)

ENC 1101	Freshman Composition
ENC 1102	Literary Analysis *(Prerequisite: ENC 1101)*

ENC 1101 and ENC 1102 must be completed before enrolling in other Gordon Rule courses.

Mathematics (two courses required, 'C' or higher required)

One course must be from the following list:

Note: MAC 1102 College Algebra and MAC 1114 Trigonometry are equal to MAC 2132)

MGF 1202	Finite Math
MAC 2132	Pre-Calculus
MAC 2233	Calculus for Business
MAC 2311	Calculus I
MAC 2312	Calculus II

A second course may be chosen from the following list:

CGS 2060	Introduction to Microcomputers
CGS 2100	Computer Applications for Business
CGS 2420	Programming for Engineers
CGS 2423	C for Engineers
COP	Computer Programming
PHI 2100	Introduction to Logic
STA	Statistics

Natural Sciences (One biological science course and one physical science course required. Lecture and Lab must be taken concurrently)

Biological Science with Laboratory:

APB 2170	Introductory Microbiology (3)
APB 2170L	Introductory Microbiology Lab (1)
BOT 1010	Introductory Botany (3)
BOT 1010L	Introductory Botany Lab (1)
BSC 1010	General Biology I (3)
BSC 1010L	General Biology I Lab (2)
BSC 1011	General Biology II (3)
BSC 1011L	General Biology II Lab (2)
BSC 2023	Human Biology (3)
BSC 2023L	Human Biology Lab (1)
EVR 3013	Ecology of S. Florida (3)
EVR 3013L	Ecology of S. Florida Lab (1)
OCB 2003	Introductory Marine Biology (3)
OCB 2003L	Marine Biology Lab (1)
PCB 2510	Introductory Genetics (3)
PCB 2510L	Introductory Genetics Lab (1)
PCB 2700	Foundations of Human Physiology (3)
PCB 2700L	Foundations of Human Physiology Lab (1)

Physical Sciences with Laboratory:

AST 2100	Solar System Astronomy (3)
AST 2100L	Solar System Astronomy Lab (1)
AST 2201	Stellar Astronomy (3)
AST 2201L	Stellar Astronomy Lab (1)
CHM 1032	Chemistry and Society (3)
CHM 1032L	Chemistry and Society Lab (1)
CHM 1033	Survey of Chemistry (3)
CHM 1033L	Survey of Chemistry Lab (1)
CHM 1045	General Chemistry I (4)
CHM 1045L	General Chemistry I Lab (1)
EVR 1001	Introduction to Environmental Sciences(3)
EVR 1001L	Introduction to Environmental Sciences Lab (1)
GLY 1010	Introduction to Earth Sciences (3)
GLY 1010L	Introduction to Earth Sciences Lab (1)
GLY 3030	Environmental Geology (3)
GLY 3030L	Environmental Geology Lab (1)
MET 2010	Meteorology & Atmospheric Physics (3)
MET 2010L	Meteorology & Atmospheric Physics Lab (1)
PHY 2048	Physics with Calculus (5)
PHY 2048L	General Physics Lab (1)
PHY 2053	Physics without Calculus (4)

Arts (3 credits required)

ARH 2050	Art History I (3)
ARH 2051	Art History II (3)
ARH 4470	Contemporary Art (3)
ARH 4710	History of Photography (3)
ART 1202C	2D Design (3)
ART 1203C	3D Design (3)
ART 2150C	Jewelry & Metals (3)
ART 2401C	Printmaking I (3)
ART 2510C	Painting I (3)
ART 2702C	Sculpture I (3)
ART 3110C	Ceramics (3)
ART 3163C	Glassblowing (3)
ART 3310C	Drawing (3)
ART 3331C	Figure Drawing II (3)
CRW 2001	Introduction to Creative Writing (3)
DAA 1100	Modern Dance Techniques I (2)
DAA 1101	Modern Dance Techniques I-2 (2)
DAA 1200	Ballet Techniques I (2)
DAA 1201	Ballet Techniques I-2 (2)
DAA 1500	Jazz Dance Techniques (2)
DAA 2102	Modern Dance Techniques II (2)
DAA 2103	Modern Dance Techniques II-2 (2)
DAA 1202	Ballet Techniques II (2)
DAA 2203	Ballet Techniques II-2 (2)
DAN 2100	Introduction to Dance (3)
PGY 3410C	Photography (3)
THE 2000	Theater Appreciation (3)
TPP 2100	Introduction to Acting (3)

or

Permission of instructor and/or an audition are required for the following courses.

MUH 1011	Music Appreciation (3)
MUN 1100	Golden Panther Band (1)
MUN 1140	Symphonic Wind Ensemble (1)
MUN 1210	Orchestra (1)
MUN 1340	Sunblazer Singers (1)
MUN 1380	University Singers (1)
MUN 1430	University Brass Choir (1)
MUN 1460	Chamber Music (1)
MUN 1710	Studio Jazz Ensemble (1)
MUN 2440	Percussion Ensemble (1)
MUN 2450	Piano Ensemble (1)
MUN 2480	Guitar Ensemble (1)
MUN 2490	New Music Ensemble (1)
MUN 2510	Accompanying (1)
MUN 2711	Jazz Combo Class (1)

or

Modern Languages

Only intermediate levels can substitute for the Arts Requirement (2000-3000 level).

ARA 3210	Intermediate Arabic (3)
CHI 3210	Intermediate Chinese (3)
FRE 2200	Intermediate French (3)
FRE 2420	Oral Communication Skills in French (3)
FRE 2270	Foreign Study[1] (var)
GER 2210	Intermediate German (3)
GRE 3200	Intermediate Classical Greek (3)
HBR 2200	Intermediate Hebrew (3)
ITA 2210	Intermediate Italian (3)
JPA 3210	Intermediate Japanese (3)
LAT 2200	Intermediate Latin (3)
POR 2200	Intermediate Portuguese (3)
RUS 2200	Intermediate Russian (3)
SPN 2200	Intermediate Spanish (3)
SPN 2210	Oral Communication Skills in Spanish (3)
SPN 2230	Intermediate Reading in Spanish (3)
SPN 2340	Intermediate Spanish for Native Speakers (3)

Any other modern language courses above the first-year level will also satisfy this requirement. Students entering the University without two years of foreign language in high school must complete two semesters of the same language at the beginners level, pass CLEP exam, or the SAT II Language proficiency test.

Historical Foundations of Western Civilization (one Gordon Rule course required, grade of 'C' or higher required) Prerequisites: ENC 1101 and ENC 1102

AMH 2000	Origins of American Civilization
AMH 2002	Modern American Civilization
EUH 2011	Western Civilization: Early European Civilization
EUH 2021	Western Civilization: Medieval to Modern Europe
EUH 2030	Western Civilization: Europe in the Modern Era[1]
LAH 2002	Latin American Civilization[1]
WHO 2001	World Civilization

Critical Inquiry (One course required, grade of 'C' required. These are Gordon Rule courses. Prerequisites: ENC 1101 and ENC 1102)

ENG 2012	Approached to Literature
HUM 3214	Ancient Classical Culture and Civilization
HUM 3306	History of Ideas[1]
PHI 2011	Philosophical Analysis
REL 2011	Religious Analysis
SSI 3240	World Prospects and Issues[1]

Comparative Culture & Gender Studies (one course required)

AMH 4560	History of Women in the U.S. [1]
AMH 4570	African-American History[1]
ANT 3241	Myth, Ritual, and Mysticism[1] (SS)
ANT 3610	Language and Culture[1] (SS)
ANT 4273	Law & Culture[1] (SS)
ANT 4306	The Third World[1] (SS)
ANT 4451	Racial & Cultural Minorities[1] (SS)
COM 3461	Intercultural/Interracial Communications[1]
CPO 4034	The Politics of Development & Underdevelopment[1] (SS)
ECS 3003	Comparative Economic Systems[1] (SS)
FOW 3540	Bicultural Writing[1]
HUM 3225	Women, Culture & History[1]
HUM 3930	Female/Male: Women's Studies Seminar[1]
HUM 4191	Cultural Heritage & Cultural Change[1]
HUN 3191	World Nutrition[1]
INR 4024	Ethnicity & Nationality[1] (SS)
INR 4283	International Relations, Development and the Third World[1] (SS)
LIN 4651	Gender & Language[1]
LIT 3383	Women in Literature[1]
PHI 3073	African Philosophy[1]
PHM 4123	Philosophy & Feminism[1]
POT 4309	Sex, Power & Politics[1] (SS)
REL 2300	Religion of the World[1]
REL 3091	Joseph Campbell and the Power of Myth[1]
REL 3145	Women & Religion[1]
REL 3170	Religion & Ethics[1]
REL 3178	Christian Sexual Ethics[1]
REL 3302	Studies in World Religions[1]
REL 3330	Religions of India[1]
SYA 4170	Comparative Sociology[1] (SS)
SYD 4700	Minorities Race and Ethnic Relations[1] (SS)
SYD 4704	Seminar in Ethnicity[1] (SS)
SYD 4810	Sociology of Gender[1] (SS)

**(Completion of at least 24 credits is required to register for HUN 3191)*

Social Sciences (two courses required) One course from this list required.

ANT 2000	Intro to Anthropology
ANT 3409	Anthropology of Contemporary Society
ECO 2013	Principles of Macroeconomics
ECO 2023	Principles of Microeconomics
EVR 1017	Global Environment And Society
GEA 2000	World Regional Geography[1]
INR 2001	Introduction to International Relations[1]
POS 2042	American Government
POT 2002	Introduction to Political Theory
PSY 2020	Introduction to Psychology
SYG 2000	Introduction to Sociology
SYG 3002	Basic Ideas of Sociology

Additional Social Science Course:

The additional course may be selected from any listed Comparative Culture social science course (SS).

[1]These courses qualify as having an international and/or diversity focus for Teacher Education Programs common prerequisites. See program listings in the College of Education section of the catalog for additional information.

General Education Requirements

The Board of Regents has defined the General Education Requirements to consist of 36 semester hours. The University requires that all undergraduate students complete the 36 semester hours before graduation. For students entering the University with at least 36 semester hours, the requirement consists of six semester hours each in the areas of humanities, mathematics, natural science, and social science; and 12 semester hours of the Writing Requirement.

Students seeking a second baccalaureate degree will be exempt from the general education requirements if the first baccalaureate degree is from an accredited post-secondary institution of higher learning. However, this would not preclude prerequisites for the major which happen to be general education courses.

Only courses from the following list can fulfill the General Education Requirements at the University:

State Board of Education Rule 6A-10.30 (Gordon Rule)

The State of Florida requires all public community colleges and universities to include a specified amount of writing and mathematics in their curriculum to ensure that students have achieved substantial competency in these areas. This requirement must be fulfilled within the first two years of study.

Writing Requirement (12 credits)

Students must successfully complete twelve hours of writing courses with a grade of 'C' or better. Six hours must be in the composition courses (i.e., courses with the prefix ENC). The additional six hours must be taken in other courses in composition (with the ENC prefix) or in other approved courses each of which requires at least 6,000 words of written work. Students who matriculated prior to 1983 need only six credits of writing courses. The only approved courses are the following:

AMH 2000	Origins of American Civilization
AMH 2002	Modern American Civilization
ENC 1101	Freshman Composition (lower division students only)
ENC 1102	Literary Analysis (lower division students only)
ENC 1200	Business Letter and Reports
ENC 1930	Essay Writing
ENC 2210	Technical Writing
ENC 2301	Expository Writing
ENC 3211	Report and Technical Writing
ENC 3311	Advanced Writing and Research
ENC 3317	Writing Across the Curriculum
ENC 4240	Report Writing
ENC 4241	Scientific Writing
ENC 4930	Special Topics in Composition
ENG 2012	Approaches to Literature
EUH 2011	Western Civilization: Early European Civilization
EUH 2021	Western Civilization: Medieval to Modern Europe
EUH 2030	Western Civilization: Europe in the Modern World[1]
HUM 3214	Ancient Classical Culture and Civilization
HUM 3306	History of Ideas[1]
LAH 2020	Latin American Civilization[1]
PHI 2011	Philosophical Analysis
REL 2011	Religious Analysis
SSI 3240	World Prospects and Issues[1]
WHO 2001	World Civilization

Humanities (6 credits)

Art

ARH 2050	Art History Survey I
ARH 2051	Art History Survey II
ART 1202C	2D Design
ART 1203C	3D Design
ART 2300C	Drawing

English

AML 2011	Survey of American Literature I
AML 2020	Survey of American Literature II
AML 3602	African-American Literature[1]
ENG 2012	Approaches to Literature
ENG 2100	Introduction to Film
ENG 3138	The Movies
ENG 4121	History of Film
ENG 4132	Studies of Film
ENL 2011	Survey of British Literature I[1]
ENL 2021	Survey of British Literature II[1]
LIN 2002	Introduction to Language
LIT 2010	Introduction to Fiction
LIT 2030	Introduction to Poetry
LIT 2040	Introduction to Drama
LIT 2120	World Literature II[1]
LIT 3200	Themes in Literature
LIT 3383	Women in Literature[1]

History

AMH 2010	American History, 1607-1850
AMH 2020	American History, 1850-Present
AMH 3317	America and the Movies
AMH 4560	History of Women in the U.S.[1]
AMH 4570	African-American History[1]

Humanities

HUM 2512	Art and Society
HUM 3214	Ancient Classical Culture
HUM 3232	Renaissance and Baroque
HUM 3246	The Enlightenment and the Modern World
HUM 3304	Values in Conflict
HUM 3306	History of Ideas[1]
HUM 3432	The Roman World
HUM 3435	The Medieval World
HUM 3545	Art and Literature
HUM 4392	Human Concerns
HUM 4406	Film and the Humanities
HUM 4431	The Greek World
HUM 4491	Cultural Heritages and Cultural Changes[1]
HUM 4543	Literature and Philosophy
HUM 4544	Literature and the Humanities
HUM 4561	Ethics and the Humanities
HUM 4555	Symbols and Myths

Liberal Studies

LBS 4210	Women and Work in the US[1]

Modern Languages

FRE 3500	History of French Civilization
FRE 4501	Contemporary French Society
FRW 3200	Introduction to French Literature I
POR 3500	Luso-Brazilian Culture
SPN 3520	Spanish American Culture[1]
SPN 4500	Spanish Culture[1]
SPW 3820	Peninsular Spanish Literature[1]

In addition, all elementary, intermediate, and advanced language courses.

Music

MUH 1011	Music Appreciation
MUH 2116	Evolution of Jazz
MUH 3211	Music History I
MUH 3212	Music History II

Philosophy

PHH 3100	Ancient Philosophy
PHH 3200	Medieval Philosophy
PHH 3420	Early Modern Philosophy
PHH 3440	Late Modern Philosophy
PHH 4600	Twentieth Century Philosophy
PHI 2011	Philosophical Analysis
PHI 2600	Ethics
PHI 3500	Metaphysics

PHI 3762	Eastern Philosophical and Religious Thought
PHM 3200	Social and Political Philosophy[1]

Religious Studies

REL 2011	Religious Analysis
REL 3100	Religion and Culture[1]
REL 3131	New Religions in American
REL 3170	Ethics in World Religions
REL 3302	Studies in World Religions[1]

Theatre

ORI 3000	Basic Oral Interpretation
THE 2000	Theatre Appreciation
THE 4110	Theatre History I
THE 4111	Theatre History II
THE 4370	Modern Dramatic Literature
TPP 2100	Introduction to Acting
SPC 2600	Public Speaking
SPC 2602	Communication for Business

Mathematics (6 credits)

One course must be at or above College Algebra level.

Students subject to Rule 6A.10.30 need six credits of mathematics, three of which can be a computer programming course, a statistics course, or PHI 2100, Introduction to Logic. A grade of 'C' or higher shall be considered successful completion of this requirement.

Students who matriculated prior to 1983 need only three credits of mathematics, but they must be in a mathematics course.

CGS 2060	Introduction to Microcomputers
CGS 2100	Computer Applications for Business
CGS 2420	Programming for Engineers
CGS 3403	COBOL for Non-Computer Science Majors
COP 2172	Programming in Basic
MAC 1102	College Algebra
MAC 1114	Trigonometry
MAC 2132	Pre-Calculus
MAC 2233	Business Calculus
MAC 2311	Calculus I
MAC 2312	Calculus II
MGF 1202	Finite Mathematics
PHI 2100	Introduction to Logic
STA 1013	Statistics for Social Services
STA 2122	Introduction to Statistics I
STA 3163	Statistical Methods I
QMB 3200	Application of Quantitative Methods in Business

Natural Science: (6 credits)

Biological Sciences

APB 2170	Introductory Microbiology
APB 2170L	Introductory Microbiology Laboratory
BOT 1010	Introductory Botany
BSC 1010	General Biology I
BSC 1010L	General Biology I Laboratory
BSC 1011	General Biology II
BSC 1011L	General Biology II Laboratory
BSC 2023	Human Biology
BSC 2023L	Human Biology Laboratory
OCB 2003	Introductory Marine Biology
OCB 2003L	Introductory Marine Biology Laboratory
PCB 2510	Issues in Genetics-recDNA and IQ
PCB 2510L	Introduction to Genetics Lab
PCB 2700	Foundations of Human Physiology
PCB 2700L	Foundations of Human Physiology Laboratory

Chemistry

CHM 1032	Chemistry and Society
CHM 1032L	Chemistry and Society Lab
CHM 1045	General Chemistry I
CHM 1045L	General Chemistry I Lab
CHM 1046	General Chemistry II
CHM 1046L	General Chemistry II Lab
CHM 2200	Survey of Organic Chemistry
CHM 2200L	Survey of Organic Chemistry Lab

Dietetics and Nutrition

HUN 2201	Principles of Nutrition
HUN 3122	Nutrition and Culture[1]

Environmental Studies

EVR 3010	Energy Flow in Natural and Man-made Systems
EVR 1001	Introduction to Environmental Science
EVR 10011L	Introduction to Environmental Science Lab
EVR 3013	Ecology of South Florida
EVR 4312	Energy Resources

Geology

GEO 2200	Physical Geography
GEO 2200L	Physical Geography Lab
GEO 3510	Earth Resources
GLY 1010	Introduction to Earth Science
GLY 1010L	Introduction to Earth Science Lab
GLY 1100	Historical Geology
GLY 1100L	Historical Geology Lab
GLY 3030	Environmental Geology
GLY 3030L	Environmental Geology Lab
GLY 4650	Paleobiology
OCE 3014	Oceanography

Physics

AST 2100	Solar System Astronomy (3)
AST 2100L	Solar System Astronomy Lab (1)
AST 2201	Stellar Astronomy
AST 2201L	Stellar Astronomy Lab
PHY 2048	Physics with Calculus
PHY 2048L	Physics with Calculus Laboratory I
PHY 2049L	Physics with Calculus Laboratory II
PHY 2053	Physics without Calculus I
PHY 2054	Physics without Calculus II

Social Science (6 credits)

Anthropology

ANT 2000	Introduction to Anthropology

Economics

ECO 2013	Principles of Macroeconomics
ECO 2023	Principles of Microeconomics

Education

CHD 4210	Middle Childhood and Adolescent Development

Environmental Studies

EVR 1017	Global Environmental Society

Criminal Justice

CCJ 3011	The Nature and Causes of Crime

International Relations

GEA 2000	World Regional Geography[1]
GEO 3471	Political Geography[1]
INR 2001	Introduction to International Relations[1]
INR 3043	Population and Society[1]
INR 3081	Contemporary International Problems[1]

Journalism & Mass Communication

MMC 3602	Mass Media and Society

Political Science

POS 2042	American Government

Psychology

CLP 3003	Personal Adjustment
CLP 4144	Abnormal Psychology
CYP 3003	Introduction to Community Psychology
DEP 2000	Human Growth and Development
DEP 2001	Psychology of Infancy and Childhood
DEP 3303	Psychology of Adolescence
DEP 3404	Psychology of Adulthood
DEP 4464	Psychology of Aging

EAB 4794	Principles and Theories of Behavior Modification
EXP 3304	Motivation and Emotion
EXP 4605	Cognitive Processes
INP 2002	Introductory Industrial/Organizational Psychology
PPE 3003	Theories of Personality
PSY 2020	Introductory Psychology
SOP 2772	Psychology of Sexual Behavior
SOP 3004	Introductory Social Psychology
SOP 3015	Social and Personality Development
SOP 3742	Psychology of Women[1]
SOP 3932	Psychology of Drugs and Drug Abuse
SOP 4525	Small Group Behavior
SOP 4645	Consumer Psychology
SOP 4834	Psychology of Health and Illness

Sociology

SYG 2000	Introduction to Sociology
SYG 3002	Basic Ideas of Sociology

[1]These courses qualify as having an international and/or diversity focus for Teacher Education Programs common prerequisites. See program listings in the College of Education section of the catalog for additional information.

Additional Policies and Requirements

1. A student who has graduated from a Florida public community college with an Associate in Arts degree will have met the University's General Education Requirements.

2. A student who has met the General Education Requirements of any institution in the State University System of Florida will have met the University's General Education Requirements.

3. A student who has taken the freshman and sophomore years in an accredited college other than a Florida public community college or an institution in the State University System of Florida may receive credit for courses meeting the University's General Education Requirements.

4. Students who have been admitted before completing an equivalent general education program, must do so at the University prior to graduation.

5. Most departments require for admission to their degree programs certain freshman and sophomore common prerequisite courses in addition to the General Education Requirements. Applicants should consult the catalog section dealing with the program they wish to pursue to determine the nature and extent of the additional requirements.

Foreign Language Requirement

In addition to the above General Education Requirements, any student who was admitted with a foreign language deficiency must successfully complete two semesters of instruction in one foreign language prior to graduation.

Transfer Credit

For purposes of clarity, transferability refers to the conditions under which the University accepts credits from other post-secondary institutions. Applicability of credit toward a degree refers to the prerogative of the respective academic division to count specific credit toward a student's degree requirements. Normally, collegiate work will be considered for transfer credit only from post-secondary institutions that are fully accredited by a regional accrediting association. The Office of Admissions will evaluate the acceptability of total credits transferable to the University. Transfer credit will be applied as appropriate to a student's degree program. The authority to apply such credit to the degree rests with the academic division of the student's intended major. If a student chooses to transfer to another academic division within the University, credit previously earned at another post-secondary institution will be re-evaluated and applied as appropriate to the student's new degree program.

A maximum of 60 lower division semester hours taken at a two or four-year institution may be counted toward a degree at the University. A maximum of 30 additional upper division semester hours taken at a senior institution may be counted toward a degree at the University.

Lower division courses in excess of 60 semester hours may serve to meet specific course requirements for an FIU degree, but credit hours represented by these courses will not reduce the number of credit hours to be completed at the University.

A grade of 'D' will be accepted for transfer credit although it may not satisfy specific requirements. However, such a grade in coursework in the major field is subject to review and approval by the appropriate academic department. Credit from institutions not fully accredited by a regional accrediting association will not be accepted; however, when presented, it will be considered on an individual basis by the appropriate College or School. Credit from military schools will be transferred in accordance with the recommendations of the American Council on Education. Credit from foreign institutions will be considered on an individual basis.

Acceleration

The academic programs of the University are planned in such a manner that students may complete some of their degree requirements through one or more of the mechanisms listed below. Specific information on the accelerated mechanisms utilized in each academic program is available from the department or program of the student's major.

Credit For Non-College Learning

The award of credit for learning acquired outside the university or class-room experience is the prerogative of each academic department or program. Only degree-seeking students are eligible to receive this type of credit. The significant learning must be applicable to the degree program of the student, and should be discussed and appropriately documented at the time the desired program of study is initially discussed and decided with the student's program advisor.

College Level Examination Program (CLEP)

The College Level Examination Program is designed to measure knowledge in certain subject matter areas of general education. There are two types of CLEP tests: General Examination and Subject Examination.

Because CLEP credit is regarded as transfer credit, no matter how earned, the maximum transferability of credit under CLEP, both General and Subject examinations combined, is 45 semester credits.

Not more than six semester hours will be transferred in each of the five areas of the General Examination (English, humanities, mathematics, natural sciences, social sciences/history). It will count as elective credit.

For additional information on CLEP, contact the Office of Admissions.

Core Curriculum CLEP

The University awards credit for CLEP scores at the 50th percentile or higher. For students completing the Core requirements, only the following examinations will be recognized for credit. It is strongly recommended that CLEP examinations be taken prior to enrollment at the University.

CLEP Subject Examinations

American Literature, Analysis and Interpretation of Literature, Calculus, English Literature, General Biology, General Chemistry, General Psychology, Introduction to Psychology, Introduction to Sociology, Macro Economics, Micro Economics, Modern Language.

General Education CLEP

The University awards credit for CLEP scores at the 50th percentile or higher. For students entering with more than 36 semester hours, the following CLEP general examinations may meet the General Education requirements:

English Composition with Essay: A student will be awarded up to six semester hours of credit for English, less hours previously earned in any college-level English course. The English examination must be with essay and will not count towards the English Composition requirement. These credits will only count toward elective credit.

Humanities: A student will be awarded up to six semester hours of credit if a satisfactory score is achieved.

Mathematics: A student will be awarded up to six semester hours of credit if a satisfactory score is achieved.

Natural Science: A student will be awarded up to three semester hours of credit in biology or physical science, or both, if a satisfactory score is achieved.

Social Science: A student will be awarded six semester hours of credit if a satisfactory score is achieved.

For additional information regarding the CLEP Subject Examinations, contact the Office of Admissions.

Advanced Placement

The University awards credit for Advanced Placement test scores of three, four, and five. For students completing the Core Curriculum requirements, only the following examinations will be recognized for credit.

Advanced Placement: Art History, Biology, Calculus, Chemistry, English, French Literature, Government, Modern Language, Music Listening and Literature, Music Theory, Physics, Psychology, Spanish Literature.

International Baccalaureate

The International Baccalaureate (IB) program is a comprehensive and rigorous two year program leading to examinations. Based on the pattern of no single country, it is a deliberate compromise between the specialization required in some national systems and the breadth preferred in others. Florida International University recognizes the quality of the IB program and will award 6 semester hours of college credit to those students who score a 4, 5, 6 or 7 on each subject at the Higher level. Credit is also awarded for Subsidiary examinations with scores of 5, 6, or 7.

National Student Exchange

National Student Exchange provides students with the opportunity to exchange to one of 145 colleges and universities in the United States and its territories for one semester or academic year, while paying in-state tuition. Full credit is given for work satisfactorily completed on exchange. NSE offers the student the opportunity to live in a different geographic setting, explore a particular academic interest, and, of course, make new and lasting friendships with other students from all over the United States.

In order to participate in the National Student Exchange, students must be enrolled full-time and have a 3.0 cumulative GPA. For further information contact the Honors College in DM 368 at University Park, (305) 348-4100; or in Academic I 180 at the North Campus, (305) 919-5754.

The Honors College

The Honors College offers a four-year program which focuses on inter-disciplinary studies. The College is committed to curriculum integration in its approach to topics, resources and classroom practices. Every term Honors students complete one three-credit honors course toward fulfillment of the eight-semester program. In their senior year, students are given the option of completing a thesis/project in lieu of taking the two senior-year seminars.

Students will be selected to participate in the Honors College based on the following criteria:

- Incoming freshman: SAT or ACT scores, grade point average, and an application essay.
- Continuing FIU students: the application essay and grade point average
- Transfer students from Florida community colleges may qualify for transfer scholarships and must complete the full application process including the essay, letters of recommendation from previous instructors and a current official transcript.

For further information, contact The Honors College, DM 368, (305) 348-4100 or see the section titled "The Honors College" in this catalog.

Pre-Medical Advisement

For their initial advisement, students interested in entering professional schools of medicine, dentistry, optometry, or veterinary medicine should contact either the Department of Biology, OE 246, (305) 348-2201, or the Department of Chemistry, OE 200, 348-2606, at University Park at the earliest possible time. Professor Zaida Morales-Martinez, in the Department of Chemistry, (305) 348-3084, is the coordinator of pre-medical advising. After completing a substantial portion of their professional courses or at the end of their junior year, and prior to the Fall Term in which they plan to apply to professional schools, students should contact the Chairperson of the Premedical Advisement and Evaluation Committee in the College of Arts and Sciences. The Committee provides additional advisement for students wishing to enter the health professions and prepares recommendations for those applying to professional schools.

Pre-Law Advisement

Students interested in receiving information on Law School/pre-professional education, on application procedures, testing, and references should contact the Department of Political Science or the Department of Philosophy in the College of Arts and Sciences or the Department of Criminal Justice in the College of Urban and Public Affairs. A faculty advisor in these departments will advise students who plan to attend law school.

Office of the Registrar

The Office of the Registrar is responsible for directing the University registration activities, and establishing, maintaining, and releasing students' academic records. The office is also responsible for Space and Scheduling, Enrollment Certification, Veterans Affairs, Graduation, and the Student Academic Support System (SASS). The office also produces the schedule of classes and the University catalogs.

Staff in the Office of the Registrar are responsible for assisting students, faculty, other administrative offices, and the general public; to holding safe and preserving the confidentiality of the students' records; and ensuring the integrity of the University's academic policies and regulations.

The University Park office is located in PC 130, 348-2320, the North Campus office is located in ACI-100, 919-5750, and the Broward Programs at Broward Community College, Central Campus, (954) 236-1500 and University Tower, (954) 335-5257.

Classification of Students

The University classifies students as follows:

Degree-Seeking Students

This category includes students who have been admitted to a degree program, but have not completed the requirements for the degree.

Freshmen - Students who have earned fewer than 30 semester hours.

Sophomores - Students who have earned at least 30 semester hours but fewer than 60 semester hours.

Juniors - Students who have earned at least 60 semester hours but fewer than 90 semester hours.

Seniors - Students who have earned 90 or more semester hours but who have not earned a baccalaureate degree.

Non-Degree Seeking Students

These students may be either affiliated or unaffiliated in their status. Unaffiliated students are limited to taking one semester of courses at the University. Affiliated students must be approved by the appropriate College or School and must meet its specific requirements. Under no circumstances may more than 15 hours, taken as a non-degree seeking student, be applied toward graduation requirements at the University, if the student changes from non-degree seeking to degree-seeking status.

The following regulations applies to non-degree seeking students:

1. Students are not required to meet the usual admission requirements and are not officially admitted as regular students. Enrollment as a non-degree seeking student does not imply a right for future admission as a regular, degree-seeking student. Credit earned will not be counted toward a degree at the University unless such students subsequently apply for regular admission and are accepted as undergraduate or graduate students.

2. Registration is permitted on a space-available basis and is determined at the time of registration. Non-degree seeking students may not register during the official registration week for degree-seeking students.

3. No more than 15 undergraduate level semester hours earned as a non-degree seeking student may be counted toward a degree. The appropriate Dean must approve the acceptance of such credit.

4. Non-degree seeking students will not be allowed to register for more than one term without obtaining admission to a degree program at the University, or obtaining admission into a formal certificate program, or acquiring affiliated status from the department in which they are registering.

5. Applicants denied admission to the University will not be allowed to register as non-degree seeking students for a period of one year without obtaining admission into a formal Certificate Program or obtaining affiliated status from the appropriate academic department.

6. Immigration regulations prevent most foreign nationals from enrolling without being admitted into a formal degree or certificate program, depending on the visa type. Therefore, international students cannot enroll as non-degree seeking students.

Affiliated Students

Students applying for affiliated status as non-degree seeking students must be approved by the appropriate Dean in accordance with criteria approved by that College or School's Faculty Curriculum Committee.

Transient Students

This category includes students who are fully admitted and are actively pursuing a degree at another accredited two or four year institution. Such students need to present evidence of their status each semester before they will be allowed to register.

Certificate Students

This category includes students who have been accepted into a specific certificate program by the academic department responsible for that program. Certificate programs are subject to all University regulations.

College/Major Classification

Lower division students have a college designation of lower division with a major designation of their intended major (if indicated by the student). This does not imply subsequent admission to that degree program.

Degree-seeking upper division students admitted to an upper level degree program are classified according to the college or school and major of their degree program; and when applicable, to the college or school and major of their second major.

When admitted students reach a total of 60 or more credit hours (including transfer and current enrollment), they may apply for admission into an upper division major, provided they have passed the CLAST or met the necessary requirements for CLAST exemption. All degree-seeking undergraduates must be admitted into an upper division major prior to completing 75 credit hours, including transfer hours.

Academic Degree Requirements

Bachelor's Degree

The University will confer the bachelor's degree when the following conditions have been met:

1. Recommendation of the faculty of the College or the School awarding the degree.

2. Certification by the Dean of the College or the School concerned that all requirements of the degree being sought have been completed.

3. A minimum of 120 semester hours in acceptable coursework is required for the Bachelor's degree.

4. Completion of the last 30 credit hours at the University. Exceptions (normally not to exceed six hours) may be made in advance by the appropriate Dean.

5. Completion of the General Education Requirements or, in the case of students admitted with fewer than 36 transfer hours, the Lower Division Core Curriculum.

6. Earned a cumulative GPA of 2.0 or higher at the University.

7. Earning the grade requirements for major, core courses, and course sequences established by the appropriate College or School.

8. Satisfactory completion of the College Level Academic Skills Test (CLAST) requirement.

9. Completion of 8-10 credits in one foreign language (American Sign Language is acceptable). Students who entered the University with a foreign language requirement deficiency, regardless of whether the student holds an A.A., must now complete 8-10 credits in one foreign language. Transfer credit is applicable to the requirement, and exemption by examination is available through the Testing Office. Also, students who completed two years of high school foreign language study in one language are considered to have met the requirement.

a. Students who can demonstrate continuous enrollment in a degree program at an SUS institution or Florida Community College since Fall Term, 1989 (continuous enrollment is defined by the state to be the completion of at least one course per year) will be exempt from this requirement.

b. Also exempt are students holding an A.A. degree from a Florida Community College or SUS institution prior to Fall Term, 1989.

Two Bachelor Degrees

Two bachelor degrees may be awarded simultaneously when the following conditions have been met:

1. Requirements for two majors have been completed as certified by the appropriate academic units.

2. A minimum of 30 appropriate semester hours in addition to the requirements of one degree has been earned.

A graduate from an accredited four-year institution who applies for admission to work toward a second bachelor's degree must meet the requirements of the major department which shall include (but is not limited to) a minimum of 30 semester hours of coursework.

Two Majors for a Bachelor's Degree

Any undergraduate student who elects to do so may carry two majors and work to fulfill the requirements of both concurrently. Upon successful completion of the requirements of two majors, the student will be awarded one degree and a notation denoting both majors will be entered on the transcript. A Request for Second Major Form must be filled out in the Office of the Registrar to declare two majors.

Minors and Certificate Programs

Students who have completed an approved minor as part of their baccalaureate degree program will have this notation as a part of the degree comment on their transcript.

Students who have completed an approved certificate program will have an appropriate notation placed on their transcript.

Associate in Arts

Students who satisfactorily complete 60 semester hours of acceptable college work with an overall GPA of 2.0 or higher, fulfill the Lower Division Core requirements, pass the College Level Academic Skills Test (CLAST) and complete at least 20 credit hours in residence at the University may apply for the Associate in Arts degree. Students who transfer in 36 or more credits are not eligible to apply. The degree will not be awarded after completion of the baccalaureate degree. A notation will appear on the student's transcript but no diploma will be issued.

Summer Enrollment

All students entering any University within the Florida State University System with fewer than 60 credit hours shall be required to earn at least nine credit hours prior to graduation by attending one or more summer terms at a Florida State University.

Academic Definitions

Program and Course Regulations

Credit Hour

The term credit hour as used refers to one hour of classwork, or the equivalent, each week for an entire academic term.

Major

An integral part of the bachelor's degree is a major concentration of coursework in an approved academic discipline or area. The exact course and credit requirements and prerequisites for each major are outlined in the departmental program areas in the catalog.

Electives

Students may select courses from any academic area to complement their area or areas of study or to meet their interests in order to fulfill the credit hour requirements for the bachelor's or master's degree. Prerequisite course requirements should be considered in selecting elective courses. Students should refer to their academic program requirements concerning electives.

Minor Program

A minor program is an arrangement of courses that enables students to develop some degree of expertise in one area of study. A minor is awarded upon completion of the bachelor's degree, but is not interdisciplinary in nature.

Certificate Program

A certificate program is a combination of courses with a common base or interest selected from one or more academic disciplines and so arranged as to form an area of academic concentration. Three types of certificates are awarded: Academic, professional, and continuing studies. Students must apply and be admitted into the professional certificate program.

Change of College/School or Major

A fully admitted undergraduate student can change majors, provided he or she meets the entrance requirements of the new program, by submitting a Request for Change of College/School or Major form. The form and instructions are available in the Office of the Registrar. The student is subject to the program requirements in effect at the time of the change of major.

Registration

The following registration information is subject to change and students must verify the dates with the Office of the Registrar, PC 130, University Park; or ACI-100, North Campus; or at the Broward Program, BCC Central Campus, (954) 236-1500 and University Tower, (954) 335-5257.

All students, degree and non-degree seeking, registering for more that 18 credit hours during one semester must obtain the approval and the signature of the Dean of their College or School.

Registration for courses is as follows:

Official Registration is held during the preceding semester (check the Academic Calendar for the dates) and ends one week later. Degree seeking students are given an appointment day and time based on their classification, GPA, and credit hours completed. Students may add/drop at this time.

Open Registration is held following Official Registration. There is no appointment day and time and registration is on a first-come, first-serve basis. All students who have not yet registered are encouraged to do so at this time. Students who have already registered may also add or drop courses during this period.

Telephone Registration

All students are able to find out their grades, registration appointment time and day, classroom assignments, registration holds (if any), and register/ add and drop courses using a touchtone telephone. (305) 348-1500, the World Wide Web (http://sis.fiu.edu), or the on-campus kiosks.

To use the Telephone Registration System, or the on-campus kiosks, students are given an access code by the Office of the Registrar. Call (305) 348-2320 for information.

Immunization

To register for courses, students, under the age of 40, must provide the University Health and Wellness Center, University Park; HM 110, North Campus with documentation of immunization against measles and rubella. Students should contact the Health and Wellness Center for more information at 348-2401 or at 919-5620.

Late Registration Fee

Any student, degree-seeking or non-degree seeking, who initiates registration after the registration deadline is assessed a $100.00 late registration fee. Students may initiate late registration during the first week of classes.

Dropping and Adding Courses

The Official Drop/Add period runs throughout the first week of classes (Check Academic Calendar for specific dates). During this period a student may add courses or register with a late registration fee. Students may also drop courses or withdraw from the University with no record of enrollment and without a tuition fee liability. Students may submit a drop/add card to the Office of the Registrar or use the Telephone Registration System, the World Wide Web (http://sis.fiu.edu), or the on-campus kiosks to officially drop a course. If the tuition fee has already been paid, a refund will be generated by the Cashier's Office and mailed to the local address on file.

Late Adds

Students may add courses with appropriate authorization and signatures until the end of the third week of classes. No course can be added after this deadline.

Late Drops

Courses officially dropped after the Drop/Add period and through the eighth week of the term, (summer terms have different deadlines - check the Academic Calendar for specific dates), are recorded on the student's transcript with a grade of 'DR' (dropped). The student is financially liable for all dropped courses. Students must submit a Course Drop Form to the Office of the Registrar to officially drop a course. *Non-attendance or non-payment of courses will not constitute a drop.*

A student may appeal the deadline for a late drop by submitting the Appeal for Late Drop form. A drop after the deadline will be approved only in cases where circumstances beyond the student's control make it impossible for the student to continue. The student must provide appropriate documentation. The instructor will designate whether the student was passing or failing the course at the time of the appeal to drop. A 'WP' grade indicates the student withdrew from the class with a passing grade. A 'WF' grade indicates the student withdrew from the class with a failing grade. The 'WF' grade is calculated in the student's term and cumulative GPA. The deadline to submit this appeal is the last day of classes of the term.

Withdrawal from the University

A currently registered student can withdraw from the University only during the first eight weeks of the semester. In the Summer semester, withdrawal deadlines will be adjusted accordingly. A Withdrawal Form must be filled out and submitted to the Office of the Registrar. *Non-attendance or non-payment of courses will not constitute a withdrawal.* (Refer to the Academic Calendar for the deadline dates.)

The transcript of a student who withdraws before or during the first week of classes will contain no record of enrollment and no tuition fee will be assessed. If the tuition has already been paid, a refund will be generated by the Cashier's Office and mailed to the local address on file. If a student withdraws from the University prior to the end of the fourth week of classes, a 25 percent refund, will be issued.

The transcript of a student who officially withdraws after the Drop/Add period and before the end of the eighth week of the term will receive a 'WI' for each course.

The transcript of a student who stops attending the University without officially withdrawing from the University will receive an 'F' grade for each course.

A student may appeal the deadline for a late withdrawal by submitting the Appeal for Late Withdrawal Form. A withdrawal after the deadline will be approved only in cases where circumstances beyond the student's control make it impossible for the student to continue. The student must submit appropriate documentation. The instructor will designate whether the student was passing or failing the course(s) at the time of the appeal to withdraw. The deadline to submit this appeal is the last day of classes of the term.

Grading System

Grades		Grade Points Per Credit Hour
A		4.00
A-		3.67
B+		3.33
B		3.00
B-		2.67
C+		2.33
C		2.00
C-		1.67
D+		1.33
D		1.00
D-		0.67
F Failure		0.00
P Satisfactory (Pass)		N/A
IN	Incomplete[1]	N/A
WI	Withdrew from University	N/A
WP	Withdrew from University after deadline with passing grade	N/A
WF	Withdrew from University after deadline with failing grade	0.00
AU	Audit	N/A
DR	Dropped Course	N/A
DP	Dropped after deadline with passing grade	N/A
DF	Dropped after deadline	

	with failing grade	0.00
NR	Grade Not Reported or Invalid[2]	N/A
EM	Examination	N/A

[1]IN is only a temporary symbol. It will revert to the default grade after two consecutive terms.

[2]NR is only a temporary symbol. It will default to an 'F' after two consecutive terms if it is not changed by the instructor.

Note: All courses for which a student is officially registered at the end of the Drop/Add Period and for which a Letter Grade, a 'DF', or a 'WF' is received are calculated in the GPA.

Grading Options

The Academic Units make the determination of the grading option of each course. A course may be offered for a letter grade as listed above or Pass/Fail; or for an optional grade in which the student has a choice of either receiving a letter grade or pass/fail; or the student may choose to audit a course and an 'AU' grade will be recorded on the student's record. The grading option must be indicated at the time of registration. The grading option cannot be changed after the Drop/Add period (first week of classes). There are no exceptions to this deadline.

To register for an audit, the student must obtain the permission and signature of the instructor of the course to be audited. Once the course is registered for as 'Audit', the grading option cannot be changed.

Incomplete Grade

An incomplete grade is a temporary symbol given at the discretion of the instructor for work not completed, because of serious interruption not caused by the student's own negligence. An incomplete must be made up as quickly as possible but no later than two consecutive semesters or it will automatically default to the grade that the student earned in the course. There is no extension to the two consecutive semester deadline. The student must not register again for the course to make up the incomplete.

Students who receive an incomplete grade and have applied for graduation at the end of that term, must complete the incomplete grade by the end of the fourth week of the following term. Failure to do so will result in a cancellation of graduation. The student will need to reapply for graduation.

Forgiveness Policy

The forgiveness policy a method by which students may repeat a limited number of courses to improve their grade point average (GPA). Only the grade received on the last repeat is used in the GPA calculation. Under the University's forgiveness policy, students must file a Repeated Course Form with the Office of the Registrar. There is no time limit on the use of the forgiveness policy for grades; however, the forgiveness policy cannot be used once a degree is posted. All courses taken with the grades earned will be recorded on the student's transcript. The repeated course form will not be processed if the first or repeated grade received is 'DR', 'DP', 'IF' 'WI', 'WP', 'AU', 'NR', or 'EM'. Repeated courses will be appropriately designated (T: attempted; R: last repeat).

Undergraduate students may use the forgiveness policy a maximum of three times for the purpose of improving the GPA. The same course may be repeated up to three times or the student may use the three opportunities to apply to three different courses. Only the final grade for the three courses repeated under the forgiveness policy will be counted in computing the student's GPA. In order for a course to be considered as repeated and adjusted in the GPA, the course must be the same and must be repeated at the University. Students who have used their three options under the forgiveness policy may still repeat courses; however, both the original grade and any additional grades received through repetitions of the course will be used in computing the GPA.

A course taken on a letter grade basis must be repeated on the same basis. Students will not be allowed additional credit or quality points for a repeated course unless the course is specifically designated as repeatable (independent study, studio courses, etc.). Students not using the forgiveness policy may still repeat a course. All attempts will apply to computation of the GPA but credit for one attempt will apply toward graduation. Students must check with the appropriate academic department to determine whether there are additional restrictions on repeating courses.

Departmental Credit by Examination

Departmental credit by examination is available for certain courses. A student who has already gained knowledge of a subject offered at the University and who wishes to take an examination in lieu of taking the course should discuss the matter with his/her academic advisor and with the department offering the course.

Awarding departmental credit by examination is the prerogative of each academic unit. To receive credit by examination, a student must be a regular degree-seeking student, register, and pay for the courses. Once the student is awarded the departmental credit by examination, an 'EM' grade will be recorded on the transcript.

Change or Correction of Grades

Once submitted, end-of-semester grades (except Incompletes and NR's, which default at the end of two consecutive terms) are final. They are subject to change only through a Change of Grade Form to correct an error in computation or transcribing, or where part of the student's work has been unintentionally overlooked.

Final Examinations

Final examinations will be given during the week following the last day of classes each semester. The Summer Semesters do not have final examination periods and course examinations may be given at the discretion of the faculty member teaching the course.

Final Grades

Final grades are available over the Telephone Registration System at (305) 348-1500, the World Wide Web (http://sis.fiu.edu), or through the on-campus kiosks.

Dean's List

Any fully admitted undergraduate student who earns a semester average of 3.5 or higher on nine or more semester credit hours of coursework for which grade points are earned, is placed on the semester Dean's List. This achievement is noted on the student's semester report of grades and permanent academic record (transcript).

Application for Graduation

Students who plan to graduate are required to submit to the Office of the Registrar an Application for Graduation Form. This form must be submitted before the last day of classes of the academic semester prior to graduation. Students turning in the Application for Graduation after the deadline will graduate the following

semester. There is no charge for applying for graduation.

Students who do not graduate must re-apply for graduation and complete the remaining requirements needed to graduate.

Academic Honors

Summa Cum Laude

To graduate Summa Cum Laude, a student must have earned a cumulative FIU GPA of 3.90 and higher.

Magna Cum Laude

To graduate Magna Cum Laude, a student must have earned a cumulative FIU GPA of 3.70 - 3.899.

Cum Laude

To graduate Cum Laude, a student must have earned a cumulative FIU GPA of 3.50 - 3.699.

To graduate with the above honors, the student must have completed a minimum of 40 semester hours at the University for which grade points are awarded.

Academic Warning, Probation, and Dismissal

Warning

An undergraduate student whose cumulative GPA falls below a 2.0 will be placed on warning, indicating academic difficulty.

Probation

An undergraduate student on warning whose cumulative GPA falls below 2.0 will be placed on probation, indicating serious academic difficulty. The College/School of the student on probation may indicate the conditions which must be met in order to continue enrollment.

Dismissal

An undergraduate student on probation whose cumulative and semester GPAs fall below a 2.0 will automatically be dismissed from his/her program and the University. An undergraduate student will not be dismissed prior to attempting a minimum of 20 semester hours of coursework. The student has ten working days to appeal the dismissal decision. This appeal must be made in writing to the Dean of the College or the School in which the student is admitted. The dismissal from the University is for a minimum of one year. After one year, the student may apply for readmission (see Readmission) to the University in the same or a different program, or register as a non-degree seeking student.

Dismissed students applying for admission or registering as non-degree seeking students are placed automatically on academic probation.

Student Records

Florida International University assures the confidentiality of student educational records in accordance with State University System rules, state, and federal laws including the Family Educational Rights and Privacy Act of 1974, as amended. Student academic records are maintained in the Office of the Registrar and in the academic department of the student's major. All currently enrolled and former students have the right to review their records to determine their content and accuracy. Parents of dependent students, as defined by the Internal Revenue Code, and who give evidence of the dependent status, have the same rights. For the cost of photocopying, students may generally have copies of any documents in their file, except for other institutions' transcripts.

Release of Student Information from Educational Records

The disclosure or publication of student information is governed by policies of Florida International University and the Board of Regents of the State University System of Florida within the framework of State and Federal Laws, including the Family Educational Rights and Privacy Act of 1974, as amended.

A student's consent is required for the disclosure or publication of any information which is a) personally identifiable and b) a part of the educational record. However, certain exceptions to that generality, both in types of information which can be disclosed and in access to that information, are allowed within the regulations of the Family Educational Rights and Privacy Act. The following persons and organizations may have access to personally identifiable information without a student's prior consent:

Faculty, administrators, staff and consultants employed by the University or the Board of Regents whose work involves:

1. Performance of administrative tasks which relate to students;
2. Performance of supervisory or instructional tasks which relate to students; or
3. Performance of services which benefit students.

A student's prior consent is not required for disclosure of portions of the educational record defined by the institution as Directory information. The following Directory Information may be released by the University:

1. Name, local and permanent address and telephone number(s);
2. Date and place of birth, and sex;
3. Classification and major and minor fields of study;
4. Participation in officially recognized activities and sports;
5. Weight and height of members of athletic teams;
6. Dates of attendance, degrees and awards received;
7. The most recent previous educational agency or institution attended by the student; and
8. Photographic image.

The information above, designated by the University as Directory Information, may be released or published by the University without a student's prior written consent unless exception is made in writing by the student or the parents of a dependent student.

In order to prevent access to or release of Directory Information, students or the parents of dependent students, must notify the Registrar (PC 130), in writing prior to the first class meeting day of the semester. Access to, or release of Directory Information will be withheld until further written instruction is received from a student, or the parents of a dependent student.

Students have a right to challenge the accuracy of their educational records and may file written requests to amend these records. The Office of the Registrar (PC 130) should be contacted for further information regarding the procedure to follow for questions or problems.

For complete information regarding the policies outlined above, please contact:

University Registrar
Florida International University
University Park - PC 130
Miami, Florida 33199
e-mail: Register@fiu.edu

Student Social Security Numbers

FIU expects all students to have a valid social security number. Enrolled students who do not have one will have three months to provide the Registrar's Office with proof of a valid social security number. Foreign students are encouraged to apply for a Social Security Number if they plan on

working on campus. However, it is not required for enrollment purposes.

Transcripts

The transcript is the complete student record of courses taken at the University, in addition to the number of transfer credits accepted. The GPA is calculated for all courses taken at the University after Fall Term 1975. Once a Baccalaureate, Master's, or Doctorate degree is earned, the GPA calculation starts again.

Students must request their transcript in writing. There is a 3-5 working days processing period . The transcript will not be released if the student has a University financial liability and/or a defaulted student loan. There is $5.00 charge per transcript.

Class Attendance

The University does not have an attendance policy. However, individual faculty may establish attendance criteria in classes where deemed necessary. Academic units may establish their own attendance policies with the approval of the Provost.

Policy Statement with Reference to Religious Holy Days

A faculty member who wishes to observe a religious holy day shall make arrangements to have another instructor conduct the class in his/her absence, if possible, or shall reschedule the class.

Because there are some classes and other functions where attendance may be considered essential, the following policy is in effect:

1. Each student shall, upon notifying his/her instructor, be excused from class to observe a religious holy day of his/her faith.

2. While the student will be held responsible for the material covered in his/her absence, each student shall be permitted a reasonable amount of time to make up any work missed.

3. No major test, major class event, or major University activity will be scheduled on a major religious holy day.

4. Professors and University administrators shall not arbitrarily penalize students who are absent from academic or social activities because of religious observances.

Veterans Information

The Office of Veterans Affairs assists all veterans and their dependents who wish to receive VA educational benefits. The Office also provides personal counseling, fee deferments, tutorial assistance, and work-study jobs. The VA Office is located in PC 138, University Park; and in ACI-100, North Campus.

Veterans who are planning to attend the University should contact the Office of Veterans Affairs two months prior to the date of entry. Such time is required to expedite the processing of paperwork for educational allowances from the Veterans Administration.

Training Status

Full time	12 Credits
3/4 time	9 Credits
1/2 time	6 Credits
Less than 1/2 time	5 Credits

Rate of Payments Number of Dependents

For rate of monthly payment of educational allowances for veterans and dependents, please contact Office of Veterans Affairs.

For additional information regarding other Veterans Educational Programs, contact the Office of Veterans Affairs at University Park, PC 138, 348-2838.

Enrollment Certification

The Office of the Registrar is responsible for certification of student enrollment. Certification cannot be processed if the student has a financial liability.

Enrollment Status

Undergraduate:

Full time: 12 credits or more.
Half time: 6 - 11 credits.
Less than half time: 5 credits or less.

Enrollment status is for continuous enrollment for the semester in which the student attended. Reduction of course load will reflect the student's status. Contact the Office of the Registrar for further details.

Florida Residency Information

Florida Student Definition

For the purpose of assessing registration and tuition fees, a student shall be classified as a Florida or non-Florida Resident.

To qualify as a Florida Resident, the student must:

1. Be a U.S. Citizen, Resident Alien, parolee, Cuban National, Vietnamese Refugee, or other legal alien so designated by the U.S. Immigration and Naturalization Service.

2. Have established a legal residence in this State and have maintained that legal residence for 12 months immediately prior to the start of the term in which the student is seeking Florida resident classification. The student's residence in Florida must be as a bona fide domiciliary rather than for the purpose of maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education, and should be demonstrated as indicated below (for dependent students as defined by IRS regulations, a parent or guardian must qualify).

3. Submit the following documentation (or in the case of a dependent student, the parent must submit documentation), prior to the last day of registration for the term for which resident status is sought:

a. Documentation establishing legal residence in Florida (this document must be dated at least one year prior to the first day of classes of the term for which resident status is sought). The following documents will be considered in determining legal residence:

(1) Declaration of Domicile

(2) Proof of purchase of a home in Florida which the student occupies as his/her residence.

(3) Proof that the student has maintained residence in the state for the preceding year (e.g., rent receipts, employment record).

b. Documentation establishing bona fide domicile in Florida which is not temporary or merely incident to enrollment in a Florida institution of higher education. The following documents will be considered evidence of domicile even though no one of these criteria, if taken alone, will be considered conclusive evidence of domicile (these documents must be dated at least one year prior to the first day of classes of the term for which Florida resident status is sought):

(1) Declaration of Domicile

(2) Florida voter's registration

(3) Florida driver's license

(4) Proof of real property ownership in Florida (e.g., deed, tax receipts).

(5) Employment records or other employment related documentation (e.g., W-2, paycheck receipts), other than for employment normally provided on a temporary basis to students or other temporary employment.

(6) Proof of membership in or affiliation with community or state organizations or significant connec-tions to the State.

(7) Proof of continuous presence in Florida during the period when not enrolled as a student.

(8) Proof of former domicile in Florida and maintenance of significant connections while absent.

(9) Proof of reliance upon Florida sources of support.

(10) Proof of domicile in Florida of family.

(11) Proof of admission to a licensed practicing profession in Florida.

(12) Proof of acceptance of permanent employment in Florida.

(13) Proof of graduation from high school located in Florida.

(14) Any other factors peculiar to the individual which tend to establish the necessary intent to make Florida a permanent home and that the individual is a bona fide Florida resident, including the age and general circumstances of the individual.

c. No contrary evidence establishing residence elsewhere.

d. Documentation of dependent/independent status (IRS return or affidavit)

A student can also qualify for Florida residency by one or more of the following criteria:

1. Become a legal resident and be married to a person who has been a legal resident for the required twelve-month period, or,

2. Be a member of the Armed Forces on active duty stationed in Florida, or a spouse or dependent, or,

3. Be a member of the full-time instructional or administrative staff of a state public school, state community college or state University in Florida, a spouse or dependent, or,

4. Be a dependent and have lived five years with an adult relative who has established legal residence in Florida, or,

5. Be a former student at a public institution of higher education who was properly classified as a resident who re-establishes domiciliary status and re-enrolls within a period of twelve months, or,

6. Make a statement as to the length of residence in Florida and qualification under the above criteria.

Term Courses Are Offered

Listed next to certain courses in this catalog are the designations 'F', 'S', and 'SS'. These designations indicate that the academic department normally offers these courses during the 'F' (Fall), 'S' (Spring), 'SS' (Summer) terms. Students should be aware that there are circumstances beyond the University's control (low enrollments, financial constraints, or other extenuating situations) which may result in the courses not being offered as indicated. The University is not responsible for failure to offer a course as indicated.

Financial Aid

What is Financial Aid?

Financial aid is a source of financial support provided by various agencies (federal, state and local governments, universities, community organizations, and private corporations or individuals) to help students meet the cost of attending college. It includes gift-aid (grants and scholarships) and self-help (loans and student employment).

- Grants are awards based on financial need which do not have to be repaid.
- Scholarships are non-repayable awards based either on merit, special talent and/or financial need.
- Student loans are available to students and/or their parents at low interest rates (5 to 11%).
- Student employment allows students to earn money toward their education by working part time while attending school.

Applying for Assistance

Applications for financial assistance are available in January for the following academic year which begins in August. Financial Aid applications are not reviewed until ALL documents required to complete the file are received in the Financial Aid Office.

Students who complete their files by the priority deadline of March 1, 2000 have the greatest opportunity of being considered for those financial aid programs they requested and are qualified to receive for the academic year. Files are processed according to the completion date.

Admissions: To be eligible for most financial aid programs, you must be admitted to a degree program. However, you should not wait until you are admitted to apply for assistance. Students pursuing or enrolled in qualified Certificate Programs are only eligible for student loans.

Summer Assistance: Most financial aid funds are exhausted after students are awarded assistance for the Fall and Spring semesters. Typically, student loans are the primary source of assistance for Summer enrollment.

Transfer Student Procedures: Generally, financial aid cannot be transferred from one post-secondary institution to another during the academic year. If you plan to transfer in mid year, apply to both your current institution and Florida International University to insure consideration for all applicable financial assistance.

Eligibility Criteria

To qualify for most need-based financial assistance you must meet the following basic eligibility requirements:

- demonstrate financial need;
- be a U.S. citizen or eligible non-citizen;
- be registered with Selective Service, if required;
- not be in default on a loan, or owe a repayment on Title IV aid received at any institution;
- be enrolled at least half-time in an eligible program of studies; and, maintain satisfactory academic progress.

Additional requirements may apply depending on the aid programs awarded to you.

Determining Financial Need

Financial need is defined as the difference between the estimated cost of attendance and the amount you and your family can reasonably be expected to contribute towards your educational expenses. Need analysis is a federally mandated formula which measures, in an equitable and systematic way, how much students and their families can afford to pay towards their education. Income, assets (excluding your primary residence), family size, number of family members attending college, and other items are evaluated to give a complete assessment of a family's financial strength.

Awarding Procedures

Award decisions for new students who complete their financial aid application by the priority deadline will be issued by April 15, 2000.

A financial aid package may consist of a combination of grants, loans, and work funds. Other sources of assistance such as merit awards and private and institutional scholarships will be taken into consideration when preparing the award.

Sources of Assistance

The University participates in all Federal and State funded programs. Institutional assistance is available for students with academic promise and financial need.

Academic Merit Assistance: The University's commitment to academic excellence is highlighted through programs which honor students who are recognized as National Merit, National Achievers and National Hispanic Scholars. Additional awards for outstanding high school seniors include the Faculty Scholars, Valedictorian and Salutatorian Scholarships. For detailed information regarding these programs, contact the Office of Admissions at (305) 348-3671.

Financial Aid Services

Financial Aid Counseling

A Financial Aid Administrator is available without an appointment to assist students with special problems, technical questions, exceptions, etc.

1. **Web and Voice system Access:** You can obtain information on the status of your application through the Financial Aid Office web page at http://sis.fiu.edu or by calling the Financial Aid Office Voice Response System (VRS), 305-348-1500.
2. **E-Mail Access:** You may also communicate with the Financial Aid Office electronically at the following e-mail address: finaid@fiu.edu

For additional information and application materials contact the Financial Aid Office:

University Park, PC 125, Miami, FL 33199
North Campus, 3000 NE 145 St., ACI 100, North Miami, Florida 33181-3600.

Student Fees and Student Accounts

Fees

Registration and tuition fees are established by the Board of Regents as required by the Florida Legislature. These fees are subject to change without notice. The currently authorized fees for academic year 1998-1999 are:

Per Credit Hour Fees

	Florida Resident	Non-Florida Resident
Undergraduate	$68.73	$290.59
Graduate, Thesis or Dissertation	$138.08	$481.64
Per Student Fees		
Athletic	$10.00	$10.00
Health	$36.00	$36.00

Registration fees for course audits are the same as the above fees, except that no assessment will be made for the out-of-state portion.

A schedule of registration and tuition fees for all programs is published prior to each semester and can be obtained at the Office of the Registrar. Since fees often change in the fall semester the above fees should be used for information purposes only. The schedule of classes will contain the most accurate fee information.

Fee Waivers

Students using a fee waiver for part of the fee payment must pay their portion on or before the last day to pay fees. Students who are responsible for a portion of their fees in addition to the fee waiver will be required to pay their portion before the fee waiver is applied.

University and State employees using the State employee fee waiver to pay their fees must register on or after the day established in the official University calendar for State employee registration. The State Employee Fee Waiver pays up to six hours of tuition and fees per term. Summer sessions A, B, and C are considered one term. If the employee registers for more than six hours, they will be required to pay for the additional credit hours plus all per student related fees. A properly completed and approved waiver form must be presented at the Cashier's Office by the date published for the last day to pay fees. Fee Waivers will be processed only for those courses shown on the approved fee waiver request form presented at the time of registration. A course over-ride card will not be accepted with the tuition waiver program. Only one fee waiver form per employee will be accepted each semester. The State employee fee waiver will not be accepted as payment for course registrations prior to the announced date for state employee registration. State Employee Fee Waivers do not cover Thesis, Dissertation, Internships, Directed Individual Study, Non Credit Courses, Sponsored Credit Programs, Certificate Programs, Field Experience, Practicum, closed courses, or courses taken for audit grades.

Senior citizens fee waivers are available to persons 60 years of age or older who meet the requirements of Florida residency as defined in this catalog. The fee waiver allows qualified individuals to attend credit classes on an audit basis. Senior citizens using the fee waiver must register during the first week of classes. Senior citizens using the fee waiver must pay the photo ID fee during their first term in attendance.

Florida law requires that State employee fee waivers and senior citizen fee waivers be granted on a space available basis only; therefore, individuals using these waivers must comply with the procedures outlined in the schedule of classes for each semester.

Refunds will not be processed for employees who have registered and paid prior to the state employee registration day and wish to use the fee waiver.

Fee Payment

Fees may be paid at the Cashier's Office at University Park, PC 120, or at North Campus ACI 140. Broward students may pay by mail or at the Cashier's Office at University Park or North Campus. Night drop boxes outside the Cashier's Offices are available 24 hours a day for fee payments by check or money order through the last day to pay fees. Payment is also accepted by mail. Mailed-in payments should be placed in the envelope included in the schedule of classes. The University is not responsible for cash left in the night drop or sent through the mail. Failure to pay fees by the established deadlines will cause all courses to be canceled. See *Fee Liability* below.

Late Registration Fee

Students who register after the established deadline for registration will be subject to $100 late registration fee.

Late Payment Fee

Students who pay fees after the established deadline for payments will be subject to a $100 late payment fee. If applicable, this fee may be assessed in addition to the late registration fee described in the preceding section.

Florida Prepaid Tuition Plan Students

All students planning to register under the Florida Prepaid Tuition Plan must present their FPTP identification card to the Cashier's Office, PC 120 on the University Park Campus or at the Cashier's Office ACI 140, on the North Campus before the published last day to pay fees. The portion of the student fees not covered by the plan must be paid by the student prior to the published last day to pay fees to avoid cancellation of classes.

Financial Aid Students

All financial aid recipients must come to the Cashier's Office and pay the difference between their financial aid or scholarship awards less Federal Work Study and their final fee assessment. The student's schedule will then be automatically validated. Acceptance of a financial aid package constitutes acceptance of the above validation process.

Fee Liability

Students are liable for all fees associated with all courses in which they are registered at the end of the drop/add period. The fee payment deadline is published in the official University calendar. If fees are not paid in full by the published dates, all courses will be canceled and any money paid will be lost.

Registration is not complete until all fees are paid in full.

Repeat Course Tuition Surcharge

Repeated Attempts of Courses

The 1997 Legislature passed House Bill 1545 mandates that undergraduate students pay additional charges for the **third time a student either takes or attempts a college credit course.** Any undergraduate course taken, beginning Fall 1997, and all courses taken after this date will be subject to the repeat surcharge. Attempted hours mean those hours dropped/withdrawn after the drop/add period or failed. Withdrawls, incompletes and dropped courses will be subject to the tuition surcharge, if they are fee-liable. All students are included regardless of type of residency. Undergraduate courses are 1000 to 4000 level courses.

As of Summer 1998 the repeat course surcharge was $153.06. *The surcharge plus the base matriculation charge equates to* ***$196.98 per student credit hour*** *(based on the 1996-97 Expenditure Analysis).*

The repeat course surcharge amount may be subject to change.

The Only Exceptions:

- Any course work taken prior to Fall 1997.
- Credits earned through: cooperative education, military, waivers, audits, individualized study, courses that are repeated as a requirement of a major (except courses repeated more than 2 times to increase GPA or meet minimum course grade requirements), courses intended to continue over multiple semesters
- Attempts taken at previous institutions prior to enrolling at FIU
- Any non fee-liable withdrawal or dropped course
- Graduate level courses (courses at 5000 level or above)

Excess Hours Charge

Senate Bill 2330 enacted by the Florida Legislature in 1995 and the 1997-98 General appropriations Act directs undergraduate students to pay an additional 50 percent tuition surcharge for credit hours in excess of 115% of the hours required in the student's degree program. For the purposes of calculating excess credit hours, "excess hours" are defined as those **credit hours taken or attempted in excess of required hours for the Bachelor's degree.** Attempted hours mean those hours dropped/withdrawn after the drop/add period or failed. Examples: The B.A. in Psychology requires 120 credit hours and the B.S. in Electrical Engineering requires 128 credit hours. Psychology majors would have to pay an excess hour charge for credit hours taken above 115% of 120 or 138 credit hours. Electrical Engineering majors would be required to pay an excess hour surcharge for credit hours taken above 115% of 128 or 147 credit hours.

First Time in College (FTIC)

FTIC students entering Fall 1996 and thereafter, will be required to pay increased matriculation fees for credit hours taken in excess of Bachelor degree requirements. This increased charge will be assessed for credit hours in excess of 115% of the hours required for the Bachelor's degree.

Transfer Students

Transfer students entering Fall, 1998, and thereafter, will be required to pay increased matriculation fees for credit hours taken in excess of Bachelor degree requirements. The increased charge will be assessed for credit hours in excess of 115% of the hours "remaining to be completed for the Bachelor's degree".

Exceptions

- Students matriculating at FIU prior to Fall 1996
- Transfer students matriculating at FIU prior to Fall 1998
- Graduate students
- Military hours for active military personnel
- ROTC hours
- Personal Hardship/Disability
- Experiences that increase the value of the degree:
  - Internship hours
  - Hours to achieve dual major (NOT two degrees)
  - Study abroad hours
  - Student exchange program hours
  - Honors and related programs (e.g., LEADS scholars)
  - Hours earned through: Advanced Placement, International Baccalaureate, College Level Examination Program and Dual Enrollment

Reinstatement of Classes

Appeals for reinstatement of registration for classes canceled for fiscal reasons must be filed in writing on the prescribed form with the Cashier's Office by the time specified on the cancellation notice. Each request will be evaluated by the Reinstatement Appeals Committee. Reinstatement will be considered for all classes on the class schedule at the end of the drop/add period. Reinstatement cannot be requested selectively for certain classes. The decision of the committee is final and all reinstatement activity, including fee payment, must be completed prior to the end of the fourth week of classes. All students whose registration has been reinstated will be assessed a late payment fee. If the late registration fee is applicable it will also be assessed.

Application Fee

A non-refundable fee of $20 shall accompany each application for admission to the University.

Parking and Transportation Access Fee

All currently enrolled students will pay a per semester parking and Transportation Access Fee as follows:

Fall Semester	$24.50
Spring Semester	$24.50
Summer A, B, or C	$22.37

Students must provide the following information to the Department of Parking and Traffic to obtain a parking decal: social security number, proof of tutition and fee payment, and vehicle registration with tag number where this decal will be permanently affixed to the outside of the vehicle.

If a duplicate is requested, a hand tag will be issued for $5.33. This hand tag could be used on any other vehicle being used by the student.

Decals are issued for two year intervals. Decals issued beginning in the Fall of 1998, will expire at the end of the Summer Terms in the year 2000. During this period, students will only have to notify the Department of Parking and Traffic if they change license tags. The Parking and Transportation Access Fee is refundable along the same guidelines as the Health and Athletic fees. Parking and Traffic regualtions are strictly enforced.

Other Fees

Library Fines

Per book per library hour	.25
Maximum fine per book	$5.00
Lost book fine	$51.15

Note: These fees are subject to change as permitted by law. Additional fees may be added and special purpose fees may be assessed in some instances.

Checks

The University will accept personal checks for amounts due to the University. These checks must be in the exact amount due only. The Cashier's Office will not accept checks above the amount due, third party checks or checks for cash. State law requires that a service fee be assessed on a check returned unpaid by the bank for any reason. Service fees are based on the amount of the unpaid check. Checks for $0.01 - $50.00 are charged a $25.00 fee; $50.01 - $300.00, a $30.00 fee; $300.01 - $800.00. a $40.00 fee; and a fee of 5% of the amount of the check for all checks greater than $800.00. Checks returned by the bank can be redeemed only by cash, cashier's checks, or money orders. A personal check will not be accepted to replace a dishonored check.

Returned checks will be assigned to an agency for collection if not promptly paid. When an account has been assigned, the collection agency fee will be added to the University charges for collection at the current contract rate. Returned checks on student accounts will result in cancellation of classes and will require petition for reinstatement. See reinstatement of classes above.

The Cashier's Office will not accept a check on any student's account which has had two previous dishonored checks.

Refunds

Refunds will be processed and mailed to the address shown on the Registrar's files to all students whose fee accounts show an overpayment after the last day to pay fees. Students due a refund will not be required to submit a refund application to receive their refund, it will automatically be calculated. If there is an amount due to the university in the accounts receivable system, that amount will be deducted from any refund due.

Students who have completed registration and have paid all fees due and have completely withdrawn from the University prior to the end of the fourth week of classes are eligible for a refund of 25% of total fees paid.

Any student attending the University for the first time who completely withdraws from all of his/her classes is entitled to a prorated refund up to 60% of the semester. This only applies to first time students.

In the following exceptional circumstances, a full refund of total fees paid will be made upon presentation of the proper documentation:

- Death of a student or immediate family member (parent, spouse, child or sibling). Death certificate required.
- Involuntary call to military service. Copy of orders required.
- Illness of student of such severity or duration to preclude completion of courses. Confirmation by a physician required.

Processing of refunds will begin after the end of the last day to pay fees.

Appeals for tuition refunds must be submitted in writing to the Office of the Registrar within two years after the end of the term for which the refund is requested. There are no exceptions to this policy.

Past Due Accounts

Delinquent accounts are sufficient cause to prohibit registration, graduation, release of transcripts, or release of diplomas.

The University is not able to grant credit or time payments for any fees. Financial aid is available to those qualifying through the Financial Aid Office. A limited number of short term loans are available to full time enrolled students who may experience problems in meeting fee payment due dates.

The University reserves the right to assign any past due account to an agency for collection. When an account has been assigned, the collection agency fee will be added to the University charges for collection at the current contract rate.

Deadlines

Students are reminded that deadlines are strictly enforced. The University is not able to grant credit or to extend the fee payment period beyond the time set in its official calendar. The University does not have the authority to waive late fees unless it has been determined that the University is primarily responsible for the delinquency or that extraordinary circumstances warrant such waiver. The University has no authority to extend deadlines for individual students beyond those set by the official calendar.

Academic Affairs

The Office of Academic Affairs oversees the planning and administration of the instructional programs of the Colleges and Schools of the University. Matters affecting faculty, curriculum, and the development of undergraduate and graduate degree programs fall within its purview. Consequently, both Undergraduate Studies and Graduate Studies report to the Office of Academic Affairs.

This office also supervises academic support programs, such as Information Resource Management, the Libraries, Instructional Media Services, Sponsored Research and Training, FAU/FIU Joint Center for Environmental and Urban Problems, Latin American and Caribbean Center, Institute for Judaic Studies, Institute for Public Policy and Citizenship Studies, The Art Museum, Multilingual-Multicultural Studies Center, Planning and Institutional Research, Southeast Florida Center on Aging, and the Women's Studies Center.

Responsible for all the academic units, the chief academic officer is the Provost and Vice President for Academic Affairs. The Provost and Vice President for Academic Affairs also serves as liaison to the Florida Board of Regents for academic matters. As a member of the University Executive Staff, the Provost and Vice President leads in the overall academic planning and direction of the University.

(For detailed information on the University's Academic Centers and Institutes, refer to the Center and Institute Section.)

Honors College

Fernando Gonzalez-Reigosa, *Dean*
Stephen M. Fjellman, *Associate Dean*
Caryl Myers Grof, *Assistant Dean*
Sharon Placide, *Coordinator of Student Services*

Talented students often are forced to choose between the exciting opportunities and challenges offered by large, research-oriented universities and the close, personal environment offered by small liberal arts colleges. FIU offers the best of both worlds. The Honors College is a small community of dedicated scholars—outstanding students and committed teachers—who work together in an atmosphere usually associated with small private colleges, but they do so with all of the resources of a major state university readily at hand.

The College provides an important foundation for students who want to get the most out of their undergraduate years. Transition into higher education is made easier by the student's immediate association with a small group of students and teachers with similar capabilities and aspirations. The undergraduate experience is significantly enhanced by the broad liberal arts focus of the curriculum and the opportunity to work closely with experienced faculty from the first day on campus; and the opportunities for graduate and professional study or employment are greatly expanded because of the range of activities and experiences made available to students in the College. The Honors College at FIU offers the very best in undergraduate education.

Undergraduate Studies

Rosa L. Jones, *Dean*
Yvonne Bacarisse, *Associate Dean*
Glenda Belote, *Associate Dean*
William Beesting, *Assistant Dean*

Undergraduate Studies provides a range of academic support services and program activities which are designed to foster students' successful progress from admission to graduation. These programs include the Academic Advising Center, offering advising for freshman, undecided majors, students changing majors, non-degree seeking students, and monitoring of Core curriculum and General Education requirements; the University Learning Center and the Testing Center, providing CLAST advising and academic preparation, state and national test administration, and assistance in improving general academic skills; the Invitational Scholars Awards Program which provides Scholarships and academic support; the Academy for the Art of Teaching which provides teaching and learning support for faculty and TA's; and ROTC. For more information contact University Park, (305) 348-2099 or North Campus, (305) 919-5754.

Graduate Studies

Richard L. Campbell, *Dean*
Ruben D. Jaen, *Associate Director*

The Office of Graduate Studies is under the administration of the Dean of Graduate Studies.

The Graduate Dean is assisted by an Associate Director, who has responsibility for all requests for candidacy certification, assists with minority student recruitment and admission, and also assists the Dean of Graduate Studies in other matters.

The Office of Graduate Studies is responsible for: the implementation of the Graduate Student Grievance Policy; the development of and compliance with University graduate policy, procedures and planning; graduate financial aid distribution; University clientele linkages for development support and productivity.

Academic Deans and Department chairs within academic units have the responsibility for detailed operations of all graduate programs.

The Graduate Dean works with the Graduate Council in the formulation of new graduate policies and procedures. The Graduate Council is a subcommittee of the Faculty Senate and consists of members who also represent their respective colleges/schools on the Council. The Graduate Council reviews curricula changes proposed by academic units and endorsed by the University's Curriculum Committee.

Another committee in the Office of Graduate Studies is the Advisory Committee for Graduate Studies. This Committee makes recommendations to the Graduate Dean on the implementation of graduate policies and procedures on all programs that offer graduate degrees. The Dean of Graduate Studies serves as Chair of this Committee. Generally, the members on this Committee are assistant and associate deans who have responsibility for graduate education in their respective academic units.

Human Research Committee. Dr. Bernard Gerstman, Professor of Physics, Chairs the University Research Council which, among other things, is in charge of making decisions and giving approval to the use of human subjects on projects and research conducted by University professors and students. In addition, the Committee makes recommenda-

tions for fostering University wide research productivity.

Graduate students seeking information on general graduate policies and procedures, or instructions on preparing and filing the thesis or dissertation, should contact the Office of Graduate Studies in PC 520, University Park, or call (305) 348-2455 for an appointment. Internet users are invited to visit our web site located at www.fiu.edu/~gradstud.

Information Resource Management (IRM)

Arthur S. Gloster, *Chief Information Officer and Vice Provost, Information Resource Management*

All computing, telecommunications, library, and instructional media services on all Florida International University campuses are under the direction of the Vice Provost and Chief Information Officer. The five major units of Information Resources are: Academic Research and Computing (ARC), the Southeast Regional Data Center (SERDAC), Telecommunications, the FIU Libraries, and Instructional Technology (IT).

Academic Research and Computing (ARC)

Academic Research and Computing (ARC) provides instructional and research computing support to the faculty and students from all FIU academic departments on all campuses. Computer hardware available for student use includes an SP running a SUN MP server, an NT server, a Sparc 10 and a Sparc 5, as well as numerous PC and Macintosh microcomputers, Unix and Linux workstations. Services of interest to students include: introductory seminars and workshops on the most widely used equipment and software; use of e-mail, Internet and the Web; comprehensive documentation libraries, open popular application software packages, dial-up and open PC labs; a computer store in the Graham Center featuring educational discounts; assistance with remote access to University servers; and peer/professional consultation on various computer-related problems within limits defined by academic departments.

In addition to instructional computing support, the desktop support group provides installation, deployment, and upgrade of all desktop applications.

Lab Use: Students are required to have a valid FIU picture ID card to use ARC labs. Occasionally, during the peak periods before midterm and final exams, lab hours are extended to meet increased demand. Nevertheless, users are advised to complete assignments early; time limits may be imposed during periods of high demand. Ethical computing practices are enforced. University Park student labs are located in PC 411, PC 413, PC 414, PC 415, PC 416, PC 419, PC 422, PC 322, BA 150, ECS 210-212. GL 263 and 265. The North Campus labs are located in ACI-293, ACI 326, ACI 393, ACI 266. For a recorded message with current student lab hours, call 348-2174. Please direct other University Park inquiries to the staff offices in PC 413A, 348-2568. Please call 919-5600 for information concerning North Campus facilities. For more detailed information, see our home page at: URL://www.fiu.edu/~arc

Part-time Student Employment:

Each semester, University Computer Services employs over 60 part-time, student user consultants. Although primarily responsible for maintaining a good working environment and flow of users through lab facilities, some consultants work in ARC User Services where they assist in desktop network integration and microcomputer support. They diagnose and resolve system and equipment malfunctions in departments all across the University. Other students actually teach faculty, staff and peers to use software applications and computer resources. Given daily exposure to an extensive variety of hardware and software and direct training by ARC professional staff, working as an ARC user consultant for several semesters provides excellent job experience and references. Students with better than average interpersonal and computer skills are invited to apply for work and complete an employment application in PC 413A, PC 548, ACI 293 and ACI 295.

Southeast Regional Data Center (SERDAC)

The State University System's Southeast Regional Data Center provides primary academic computing services to Florida International University via an Ethernet network which connects student and faculty workstations to the Data Center's Unix and the RS 6000 complex cluster services.

SERDAC's computers allow convenient access to the Internet and will provide I2 access in the near future. Information on these services may be obtained by calling 348-2700.

Primary operations and dispatch services for faculty, student, and administrative printout are located in University Park, PC-436. Please call 348-2109 for information concerning this facility.

SERDAC offers personal computer/workstation maintenance to the University community. Currently, the SERDAC Maintenance Facility has been designated as a factory-authorized center for IBM, Dell, Zenith, and Apple personal computers. Please call 348-2117 for information.

Telecommunications

The Department of Telecommunications (DOT) is responsible for administrating, planning, designing, operating, installing and maintaining of voice and data communications systems, equipment and networks that serve the University community. In addition, DOT plays an integral part in the design and completion phases of the University's major construction projects and renovations.

The department's voice organization's scope of responsibility includes the planning, managing and development of the University's telephone systems (ESSX at University Park and Rolm at North Campus) including 24-hour Operator service, voice mail, feature customization, move/add/change orders and toll charge accounting. Through the data communications and network management services, DOT maintains several intercampus data communications networks and operates the University's modem pool for access to FIUnet and the Internet. These services provide users access to all networked University computing resources and gateways to statewide, national and international telecommunications networks. Also, besides day-to-day repair and installation of data communications equipment and cabling, the Department supervises the comprehensive design of communications systems and wiring for any new construction and facility renovations at the University.

Libraries

The University Libraries are housed in the newly expanded Green Library (GL) at University Park, and in Library building (LIB) on the North Campus.

The total library collection comprises more than 1,150,000 volumes, in addition to substantial holdings of federal, state, local, and international documents; maps; microforms; music scores; newspapers; institutional archives; and curriculum materials. The

Library subscribes to 8,650 scholarly journals and other serials. The number of resources available electronically via the world wide web continues to increase.

A computerized catalog of library holdings provides a listing of materials in both FIU Libraries, and other libraries in the State University System and throughout the world. The bulk of the collection is housed in open stacks.

Classification of library resources is according to the Library of Congress system, except for some of the documents and special collections (e.g., U.S., Florida, and U.N. documents, archives, etc.) which are arranged by their own classification systems and have separate public catalogs.

In keeping with the University's commitment to day and night operation, the libraries are open when the University is in session and during vacation periods. For exact library hours, please consult the posted schedules or LUIS, the library's online catalog or the library home page. Staff members are always available at the Public Service desks to assist students and faculty in their use of the library.

Consortium Library Privileges

Currently registered students, faculty, and staff may use the libraries of any of the other campuses of the State University System. For access to libraries in the southeast Florida region, students, faculty and staff should check at the circulation desk concerning SEFLIN library privileges.

A state-of-the-art system of inter-library loan provides links to the libraries world wide.

Instructional Technology

Instructional Technology supports the faculty in the development and production of various forms of technology for instructional purposes.

Instructional Development Center (IDC)

The IDC provides the training, facilities and personnel to support faculty in using various forms of technology. Some examples of the types of services provided are: training for development of web-based courses and materials, scanning of images for digital library or web courses, and assistance with computer-based presentations. Workshops and one-on-one training in the use of technology empower faculty to develop skills. (GL 120 at University Park (305) 348-3158).

Instructionlal Photography

Photography supports faculty by creating both film-based and digitized images which are used in web courses and the digital library. (GL 180 at University Park (305) 348-3158).

Video Broadcast/Production

Video provides facilities and personnel to support faculty in the broadcast and production of video. Broadcast services include live interactive classes across three campuses and special educational events to/from worldwide locations via satellite. The faculty also supports design, editing, and production of video in the studio or at remote locations for instructional purposes. (GL 141 at University Park (305) 348-2830).

International Studies

Mark B. Rosenberg, *Vice Provost for International Studies*

Giselle De Bruno Jamison, *Associate Director for International Studies*

The Office of International Studies (OIS) is responsible for the development and coordination of international programs and activities at the University. OIS staff members work with students and faculty who are interested in participating in international exchange, study abroad programs, and other international academic opportunities. OIS assists with the development agreements with foreign universities to extend the range of opportunities for students and faculty. In addition, the office advises students and faculty on the availability of Fullbright Grants, and other international scholarship opportunities.

OIS facilitates the University's interaction with local and international interest groups, serves as a liaison with universities and visitors from abroad, and promotes the international mission of the university. For more information on the services offered by OIS located in DM 300B, call (305) 348-1913, email: debrunog@fiu.edu, or www.fiu.edu/~intered.

The Office of International Studies also houses the Asian Studies Program. This program coordinates all international activities related to Asia within Florida International University.

This Office also provides information regarding the undergraduate as well as the graduate certificate program in Asian Studies, which are designed to offer a competitive advantage to interested students. Located in DM 369C, University Park. (305) 348-1914; Fax (305) 348-6586. For more information contact Steve Heine, at Heines@fiu.edu or www.fiu.edu/~asian

International Student Exchange Programs

International Student Exchange (ISE) Programs provide students with the opportunity to study abroad (during one or two semesters) at one of the various universities that have an agreement with Florida International University (FIU). Full credit is given for work satisfactorily completed during the exchange program - as long as it has been pre-approved by an advisor. Grades are not transferred. ISE offers the opportunity to live abroad, explore other languages and cultures, and become acquainted with new friends from all over the world. Students will be required to pay their normal FIU tuition, insurance, housing, and travel arrangements.

In order to participate in ISE, a student must be enrolled at FIU and have a 3.0 cumulative GPA. For further information, contact the Office of International Studies, University Park, DM 300, Miami, Florida 33199, (305) 348-1913. You can also email the office at derunog@fiu.edu

Study/Travel Programs

During the Summer semester FIU offers a number of Study/Travel Abroad Programs in coordination with different academic units, the Office of International Studies , and University Outreach. These programs are under the direction of FIU faculty members who accompany the students abroad. Students may receive credit for these programs. Each year FIU offers different opportunities and a variety of countries. Some of the programs include: FIU in Spain, Shakespeare-16th Century and Beyond!, Creative Writing in Canada, FIU in France, FIU in Prague, Art Education in France, Amazon in Brazil, Haitian Institute, FIU in Greece, Italy and Architecture, College of Business Abroad and many other programs. The Honors College also offers programs in Italy and Spain. For more information contact the Office of International Studies at (305) 348-1913, email debruno@fiu.edu or www.fiu.edu/~intered

Institutional Research and Academic Planning

TBA, *Director*
David Hall, *Assistant Director*
Marta Perez, *Assistant Director*

The Office of Institutional Research and Academic Planning provides statistical information to support decision making processes within all academic and administrative units of Florida International University, the faculty senate and different committees within FIU, the Board of Regents, state and federal agencies, and professional and private organizations.

The Office of Institutional Research and Academic Planning is known as the official source of University statistics. This office publishes research reports that provide statistical information about the university on a regular basis. Institutional Research and Academic Planning also provides information requested by the University community on an ad hoc basis. This office coordinates the collection of data, preparation of reports and files, and their submission to the Board of Regents. The coordination and submission of questionnaires and surveys from outside sources is also done by this office. All questionnaires or surveys developed by faculty or staff which are designed to collect data about the operations of the University, students or employees must be coordinated through this office. For more information about this office and its services, call (305) 348-2731.

Sponsored Research and Training

Thomas A. Breslin, *Acting Vice President*
Catherine F. Thurman, *Director*

The Division of Sponsored Research and Training serves the research and training needs of interested faculty by providing timely information on the availability of local, state, and federal program support. The attraction of these funds to the campus provides an opportunity to better serve the needs of the people of Florida through services not regularly funded by the Legislature.

Among the major goals of the Division of Sponsored Research and Training are the following: to help stimulate faculty and staff interest in research and training projects; to assist the faculty and staff in obtaining funds for research and training projects; and to provide technical assistance to faculty and staff who manage contract and grant programs for the University. For more information, contact 348-2494.

The Art Museum

Dahlia Morgan, *Director*
Regina Bailey, *Associate Director*

The Art Museum at Florida International University has served the South Florida community for the last 19 years presenting exhibition and art lectures of local, national and international importance. Exhibitions include student shows, self-curated exhibitions from both the University's collections and from institutions and organizations outside the University, and national traveling shows. The Art Museum is supported by the University community, local, state and federal agencies and Friends of the Art Museum.

The Art Museum serves Miami's multi-cultural community year round, free of charge. The Museum is home to Coral Gables' Metropolitan Museum and Art Center Collection, The Cintas Foundation of Contemporary Hispanic Art, a permanent collection of works by North and South American and Florida artists, and the site of the Martin Z. Margulies Family Collection. One of the world's most important international outdoor sculpture collections, includes works by Calder, De Kooning, Ricky, Nevelson, Serra, and other well-known artists.

The Art Museum provides a unique experience to a very broad audience including children, students, teachers, senior citizens, minorities and the disabled. Besides serving two campuses and two centers, its programs extend to surrounding counties outside of Dade including Broward, Palm Beach and Monroe Counties.

The Art Museum is accredited by the American Association of Museums and has been recognized for its excellence by the grants it has received, most recently the National Endowment for the Arts; The Institute for Museum Services; The National Endowment for Humanities, The Florida Endowment for the Humanities; The Dade County Council of Arts and Sciences; The Metropolitan-Dade County Cultural Affairs Council and the Florida Arts Council.

The Art Museum, which occupies a 5,000 square foot area on the University Park campus, opened with an internationally acclaimed exhibition, *Contemporary Latin American Drawings*, in April, 1977. Since then, many important exhibitions have been presented, including: *Alberto Giacometti, Draftsman and Sculptor; Mira, Mira, Mira: Los Cubanos de Miami; Adolph Gottlieb: Paintings and Works on Paper; Marcel Duchamp; Louise Bourgeois; The Phillips Collection in the Making: 1920 - 1930; Imagenes Liricas: New Spanish Visions; CUBA-USA: The First Generation; Jose Bedia; Agustin Fernandez: A Retrospective, Miro/Noguchi*; and the annual *American Art Today* series featuring contemporary artists exploring traditional themes including *Still Life, The Figure in the Landscape, The Portrait, Narrative Painting, The City Surface Tension, Clothing as Metaphor Images from Abroad and the Garden.*

The Art Museum has continued to enhance its exhibitions with the *Critics' Lecture Series,* which has included many of the exhibiting artists, scholars, museum curators and art historians, including: Susan Sontag, Robert Hughes, Hilton Kramer, Michael Graves, Peter Plagens, Tom Wolfe, Germaine Greer, Dore Ashton, Carlos Fuentes, Michael Brenson, Frank Stella, Richard Serra, Helen Frankenthaler, Kirk Varnedoe, Lowery Sims, Michael Kimmelman, and Anne d'Harnoncourt.

The Museum is operated by the Director, the Assistant Director, the Office Manager, the Registrar/Preparator, the Community Relations/Education Coordinator, and the Program Assistant plus a staff made up partially of University students working through an internship program.

Business and Finance

The Division of Business & Finance comprises the offices of Auxiliary Services, Parking and Traffic, Budget Planning, Controller's, Environmental Health and Safety, Equal Opportunity Programs, Facilities Management, Human Resources, North Campus Business and Finance, Office of Continuous Improvement, Public Safety and Purchasing.

Auxiliary Services

Auxiliary Services supervises the bookstore and food services operations on both University Park and the North Campus, which includes the Cafeteria, Gracie's Grill and all vending operations.

Auxiliary Services also oversees the operations of Duplicating Services, which includes a Print Shop, Convenience Copiers and a Total Copy Reproduction Center.

Controller's Office

This area is primarily responsible for maintaining accounting records, controlling budgets, coordinating financial activities and reporting on financial data. Typical functions of the Controller's Office are the payment of invoices to vendors, collection of fees and other revenues, contract and grant accounting, payroll, disbursement and collection of student loans and the reconciliation of accounting ledgers.

The Controller's Office is a service oriented unit assisting the University community in most aspects of financial operations. Questions concerning the use of State funds, internal control procedures or methods to pay a vendor or employee are normally addressed to this unit. Guidance is provided to travelers pertaining to the State requirements for the reimbursement of traveling expenses. Assistance is provided to employees in the interpretation of accounting ledgers and fiscal reports.

The following sections operate within the Controller's Office: General Accounting, Accounts Payable, Travel, Construction and Property Accounting, Contracts and Grants, Disbursement, Student Loan and Accounts Receivable, Payroll, and the Cashier's Office at all campuses.

Environmental Health and Safety

The Department of Environmental Health & Safety & Risk Management Services provides the leadership and direction necessary to assure identification, implementation and effective administration of programs designed to promote hazard recognition, avoidance, reporting and control, as well as compliance with various federal, state and local safety regulations.

In addition to programs necessary for regulatory compliance, the department takes a proactive approach on many issues. Among the programs and activities managed by the department are: investigation and initial processing of liability claims against the University; review of risk management concerns related to special events planned by student organizations and University employees and presentations to student groups; and indoor air quality investigations.

The primary component of the department's mission is service. This mission is accomplished by working in close coordination and cooperation with other departments and the University community in general. At University Park, the department is located at CP 183, 348-2621/2262. Services are provided at the North Campus from the Facilities Operations complex, S01 115, 919-5225.

Equal Opportunity Programs

This office provides leadership and direction in the administration of the University's equalization programs for women and minorities in several ways. It prepares the University's annual Affirmative Action Plan and the State Equity Accountability Plan, assists University units in implementing and monitoring affirmative action procedures; provides oversight to the University Diversity Program; provides a channel for employee and student grievances regarding discrimination, or issues indicating a need for additional affirmative actions; administers implementation of the Policy to Prohibit Sexual Harassment; coordinates University compliance with the Americans with Disabilities Act and with Title IX of the Education Amendments of 1972, and promotes effective relationships between the University and community organizations. Equal Opportunity Programs also administers the State University System's scholarship programs funded for the purpose of increasing minority enrollment. In addition, the Office maintains a liaison relationship with State and Federal agencies dealing with EEO and affirmative action. The Office is located at University Park, PC 215, (305) 348-2785.

Americans with Disabilities Act (ADA)

The Director for Equal Opportunity Programs is the University's ADA Coordinator, and has responsibility for ensuring access to employment, academic and public programs for persons with disabilities. The Office administers a central budget used to fund the costs of reasonable accommodations for University employees and applicants for employment. The office also works closely with the Office of Disability Services for Students in the provision of auxiliary aids and services to ensure access to academic programs, and with all University offices in the provision of access to University public events.

HIV/AIDS Policy

Students and employees of the University who may become infected with the HIV/AIDS virus will not be excluded from enrollment or employment or restricted in their access to University services or facilities, unless individual medically-based judgments establish that exclusion or restriction is necessary to the welfare of the individual or of other members of the University community. The University has established an HIV/AIDS Committee which includes representatives from major University divisions and other staff as appropriate. The Committee, which meets regularly, is responsible for monitoring developments with regard to HIV/AIDS, acting upon and administering the University's Policy on HIV/AIDS in specific cases, and coordinating the University's efforts in educating the University community on the nature of the disease. In addition, the Committee will meet as needed to consider individual occurrences of the disease which require University action.

Persons who know or suspect they are sero-positive are expected to seek expert medical advice and are obligated, ethically and legally, to conduct themselves responsibly for the protection of others.

The University has designated HIV/AIDS counselors who are available to provide further information on this subject. Contact one of the following offices at University Park, Director for Equal Opportunity Programs, PC 215; Counseling Services, GC 340; and Student Health Services, OE 115. North Campus contact, Counseling Services, WUC 261 or the Health & Wellness Center North Campus.

Sexual Harassment Nondiscrimination Educational Equity

All members of the University Community are entitled to study and work in an atmosphere free from illegal discrimination. Florida International University's equal opportunity prohibits discrimination against students and employees on the basis of their race, color, creed, age, disability, sex (including sexual harassment), religion, marital status, or national origin. Under the policies, it does not matter whether the discrimination was intended or not; the focus is on whether students or employees have been treated differently or subjected to intimidation, or a hostile or offensive environment as a result of their belonging to a protected class or having a protected status. Illegal sexual harassment includes unwelcome physical contact of a sexual nature, overt or implied threats to induce performance of sexual favors, verbal harassment, use of sexually suggestive terms, or display or posting of sexually offensive pictures.

Any employee, applicant, or student who believes that he or she may be a victim of unlawful discrimination may file a complaint with the Office of Equal Opportunity Programs, PC 215 at University Park (348-2785) in accordance with this procedure.

Facilities Management

Facilities Management provides professional support to planning, designing, construction, maintenance, and operations of facilities on all campuses, to accommodate all aspects of the University mission as defined in the Campus Master Plan. This department is separated into three major areas of supervision which are Facilities Development, Facilities Operations and Utilities Support Services.

Facilities Development is responsible for all design and construction projects. These activities include building programs, design coordination, construction administra-tion and occupancy coordination.

Facilities Operations is responsible for the operations and logistics of physical resources including building and grounds maintenance, custodial, landscaping, roads and parking lots.

For routine and emergency maintenance services, please contact the Customer Service Center at 348-4600 at University Park and 919-5700 at North Campus.

Utilities Support Services oversees the University's utility systems including air conditioning, water, sewage, electrical power and solid waste management. In addition, Utilities Support Services works together with Environmental Health & Safety to assure that all toxic (biological or chemical) wastes are disposed of properly.

Human Resources

The Office of Human Resources provides human resource management services for staff members and employees of all academic and administrative departments including student employees, research or graduate assistants, college work study and OPS employees on all campuses. All services provided by the office are in compliance with applicable federal and state regulations, and include six major human resources areas - Employment and Recruitment, Compensation and Pay, Employee Professional Development Programs, Employee Benefits, Personnel Records, Employee Assistance and Labor Relations.

In addition to the above mentioned human resource management areas, the Office of Human Resources is responsible for the Volunteer Program, and the Presidential Holiday Affair.

The University Park office is located in PC 224, 348-2181; the North Campus office is located at 322-A Library Building, 919-5545.

Public Safety

Public Safety is a full service law enforcement organization dedicated to assuring an environment conducive to living and learning in a University community. The department's members include Law Enforcement Officers who are fully certified and sworn, and have full police authority to enforce state, local and University regulations.

Purchasing Services

Purchasing Services is organized to support students, the instructional and research efforts of the faculty, staff, and all University departments. Purchasing involves the acquisition of equipment, furnishings, supplies, construction services, preventive maintenance services, contractual services, and lease of space for the University.

Purchasing Services is responsible for a number of functions in addition to the primary function of centralized university purchasing. These other functions include Central Stores, Central Receiving, Property Control, Surplus Property and Campus Mail.

The office is located at University Park, PC 519 and can be reached at 348-2161.

Office of Continuous Improvement (OCI)

The Office of Continuous Improvement (OCI) is responsible for a variety of programs and services. The office mandate includes the re-engineering of services and programs.

OCI works with management, staff and external consultants in an effort to improve efficiency, work environment and customer satisfaction with administrative units. The office also coordinates various awards and suggestion programs.

The office is located in PC 548 and can be reached at 348-6090.

University Budget and Planning

University Budget and Planning is responsible for the development of all operating budgets in all budget entities, including capital programs, legislative budget requests, operating budget requests and internal operating budget plan. The annual operating budget for the University is published by the office and the charts and graphs are reproduced on the website maintained by the office. A major responsibility includes the monitoring of budgets throughout the year to ensure that budgets by category are not exceeded. The office works closely with and

monitors the auxiliary enterprises of the University to ensure compliance with policies and that a strategic direction is followed. The office also has responsibility for University planning, including long range planning. Planning involves working closely with the Executive Council, which is the long range (strategic) planning body for the University, in terms of the long range vision and goals of the University, both in relation to the operating (budget) and facilties (PECO) needs. The office is located in PC 522 and can be reached at 348-2104.

North Campus and Enrollment Services

North Campus

The North Campus of Florida International University is located on 200 acres on Biscayne Bay and has an enrollment of more than 8000 students. Academic programs in Hospitality Management, Journalism and Mass Communication, Nursing, and Urban and Public Affairs are headquartered on the North Campus. In addition, degree programs in Arts and Sciences, Business Administration, Education, and Health Sciences are also offered.

The North Campus is the hub of the University's Continuing Education and outreach efforts. It serves as host to the Elders Institute, the HRS/Children and Families Professional Development Centre, the Institute of Government, the Institute for Public Opinion Research, the Roz and Cal Kovens Conference Center, and the Southeast Florida Center on Aging.

Students may apply for admission and financial aid, register for classes and receive academic advising at North Campus. The North Campus Library occupies 57,000 square feet and has a seating capacity of 600. It is a Federal and Florida State Government Document Depository. The Library has its own local area network for CD-ROMS and serves as the locus for the FIU Libraries PantherNet, a prototype remote dial-in system that allows telephone access to CD-ROMs, electronic journals, electronic reserves, library publications and provides support for Distance Learning.

Apartment-style residential housing on the North Campus accommodates 350 students. Student life is enhanced through the provision of programs and services offered in the Wolfe University Center, the focal point of social and cultural activity outside of the classroom. The Wolfe Center houses the cafeteria, University Bookstore, Student Government offices, an Olympic-size pool, computer lab, vending machines, automatic banking facilities, a post office, a 300-seat theater, meeting rooms, a ballroom and game room. Student development programs in Recreational Sports, Career Services, Disability Services, International Student Services, Minority Student Services, Orientation, Student Activities, Student Counseling, Student Health and Wellness, Victim Advocacy, the Volunteer Action Center and the Women's Center are also provided on the campus.

The Campus is administered by the Office of the Vice President of North Campus and Enrollment Services. This office is on the Third Floor of the Library. Representatives from the Divisions of Academic Affairs, Business and Finance, Student Affairs and University Relations are also located there. Liaisons with personnel in other Divisions and at University Park are coordinated through North Campus Administration and Operations, (305) 919-5490.

Office of Admissions

The Office of Admissions is responsible for the recruitment and admission of undergraduate students as well as the collection and processing of graduate admissions records. Additionally, the Office provides information to prospective students, counselors, and the public about the programs and services offered at the University. For specific information regarding University admissions policies, please refer to the General Information section of this catalog or contact the Office at (305) 348-2363 (University Park), (305) 919-5700 (North Campus) or (954) 475-4150 (Broward Programs). Students may access admissions information via the web at www.fiu.edu/orgs/admiss/
Location: University Park PC 140; North Campus ACl 160; Broward Programs 203 Liberal Arts Building.

Office of Community College Relations

The Office of Community College Relations has the primary responsibility for inter and intra-institutional relations with Florida's community colleges. Staff provide information to prospective students and community college faculty and staff to inform and update them regarding academic programs, scholarships and other information relevant to transfer students.
Location: PC 427, University Park (305) 348 6312; email: lynchs@fiu.edu

Office of Financial Aid

The Office of Financial Aid is responsible for the administration of financial aid programs which assist students in their pursuit of a University degree. Financial Aid includes scholarships, grants, loans and employment. Financial assistance based on need is determined on an individual basis using a standard formula provided by the U.S. Department of Education. For specific information on types of assistance, eligibility criteria, application procedures and other requirements, please refer to the General Information section of this catalog.
Location: PC 125, University Park, ACI-100, North Campus
Telephone: (305) 348-1500.

Office of the Registrar

The Office of the Registrar is responsible for directing the University registration activities, and establishing, maintaining, and releasing students' academic records. The office is also responsible for Space and Scheduling, Enrollment Certification, Veterans Affairs, Graduation, and the Student Academic Support System (SASS). The office also produces the schedule of classes and the University catalogs.

Staff in the Office of the Registrar are responsible for assisting students, faculty, other administrative offices, and the general public; to holding safe and preserving the confidentiality of the student's records; and ensuring the integrity of the University's academic policies and regulations.

The University Park office is located in PC 130, 348-2320, the North Campus office is located in ACI-100, 919-5750, and the Broward Programs at Broward Community College, Central Campus, (954) 236-1500 and University Tower, (954) 335-5257.

University Advancement

The Division of University Advancement coordinates the university's private fund-raising activities and generates a variety of support for the university from alumni and friends in South Florida and beyond.

Advancement comprises three areas that interact very closely: Development, Alumni Affairs, and the FIU Foundation.

Alumni Affairs

The Office of Alumni oversees the university's relations with its more than 80,000 alumni. Staff members develop programs to keep in communication with graduates and provide them with ongoing benefits such as career development and networking opportunities. The office organizes the activities of the university-wide Alumni Association and guide its chapters. It generates revenue and assists in promoting the university through an active program of merchandise licensing.

Alumni Affairs publishes the **FIU AlumniNews** newsletter, sent to all graduates, and the **FIU Magazine**, sent to university donors and the members of the FIU Alumni Association.

The Office of Alumni Affairs welcomes all graduates and guests to FIU and encourages student involvement in its student chapter and at various events. Visit the office at GC 242 or for more information 1-800-FIU-ALUM.

Development

The Development Office identifies and works with individuals, corporations, private foundations, and other organizations that have an interest in contributing to FIU. Development staff collaborate with university administrators and faculty as well as the Board of Trustees of the FIU foundation and other volunteers on specific fund-raising efforts and large-scale campaigns. In addition, they organize programs to recognize and honor the university's benefactors.

FIU Foundation

The FIU Foundation receives and administers all private gifts to the university and manages the university's investments. It is a private, separately incorporated organization authorized by the Florida legislature and regulated by the Board of Regents. It is governed by a 42-member Board of Trustees made up of prominent South Florida business and civic leaders. These board members act as the university's principal ambassadors to the community at large and provide volunteer leadership in fund-raising and other areas.

Student Affairs

The Division of Student Affairs seeks to educate a diverse body of students by supporting their personal and academic growth. We promote cross-cultural outreach and understanding, create an environment which fosters the development of the 'whole' student, promote cultural learning and pluralism, provide programs and services which enhance intellectual, social, cultural, physical, emotional, and spiritual development, support civic awareness and service learning, and prepare students to become contributing members of the community.

The following are Student Affairs departments and programs:

Campus Life

The Department of Campus Life provides learning opportunities for students to practice and develop leadership, communication, problem-solving, program planning, organization, implementation, evaluation skills, and most importantly, ***Get Involved on Campus.*** Campus Life activities are co-curricular and cover all aspects of the educational experiences and personal growth of students. Over 150 registered organizations exist to enrich campus life and contribute to the social, cultural, and academic growth of students. Activities such as multicultural theme months, dances, parties, movies, athletic events and pep rallies, community service, alternative spring breaks, concerts, comedy shows, and the lecture series, are a few of the fun and educational programs offered through the department. Students may form additional organizations and clubs that promote the University's educational mission and one's personal attributes.

The Department of Campus Life includes the Student Government Association, Student Organizations Council, Student Programming Council, Residence Hall Association, Honors Council, Greek Organizations, Campus Ministry, and the Volunteer Action Center.

Location: GC 340, University Park, (305) 348-2138; WUC 363, North Campus, (305) 919-5804; LA, Room 203, Davie, (954) 236-1518; University Tower, Room 305, Fort Lauderdale (954) 355-5279.

Greek Life

Greek Organizations contribute to the University by promoting leadership, scholarship, service, social activities and brotherhood and sisterhood. The fraternities and sororities are coordinated by a Greek Advisory Board. An Interfraternity Council governs fraternities, a National Pan-Hellenic Council governs historically African-American fraternities and sororities, and the Pan-Hellanic Council governs sororities. The Order of Omega is the honorary and leadership society of fraternities and sororities that promotes leadership and scholarship among Greeks. A formal rush (recruitment) is held in the Fall semester, and an informal rush is held during the Spring term. However, many fraternities have a 365-day recruitment schedule.

Location: GC 316, University Park, (305) 348-1293 or (305) 348-2138

Student Government Association

The Student Government Association is comprised of representatives from all Schools and Colleges who are elected by the student body. There is a Student Government Council at both the North Campus and University Park. SGA is responsible for overseeing and appropriating the Activity and Service (A&S) fees paid by all students each semester. These fees fund many of the campus life events, student activities, and clubs and organizations. SGA also acts as the liaison between the students and administrative areas of the University, specifically speaking, and lobbying on behalf of students.

SGA members represent the student body on University-wide committees and tasks forces to ensure student representation at the administrative level. SGA meets regularly and students are highly encouraged to attend meetings and become involved in all aspects of Student Government.

Location: GC 311, University Park, (305) 348-2121; WUC 363, North Campus, (305) 919-5680; LA, Room 203, Davie, (954) 236-1518; University Tower, Room 506, Fort Lauderdale, (954) 355-5279.

Volunteer Action Center

The Volunteer Action Center is the central office for community service, service learning, and volunteer activities on and off campus. The center encourages students to realize their potential to impact their community and effect social change through the power of service-learning, advocacy, and volunteerism. VAC organizes monthly volunteer projects, alternative break programs, and serves as a clearing house for volunteer opportunities.

Location: GC 340, University Park, (305) 348-2149.

Campus Ministry

The Interfaith Campus Ministry serves student groups involved in a variety of activities. Professional representatives from various faiths are available for personal appointments. Individual denominations sponsor campus-wide programs including worship, study groups, social gatherings, and cultural events. Campus Ministry sponsors programs and activities which are non-denominational.

Location: TC 112, University Park, (305) 348-3902; WUC 265, North Campus, (305) 940-5609 and 956-5247.

Career Services

Career Services is a centralized, user friendly office that assists students in choosing a major, finding a job, and securing a career. Our programs and services are "high tech" with individualized attention.

We offer automated career interests inventories, internships (many providing salary and credit), a 24-hour Golden Panther JobsLine, on-campus recruiting, Career Fairs, a Federal Government KIOSK, Law/Graduate Recruitment Day, Career forums, Resume Referrals, and videoconferencing technology for interviewing. Additionally, we offer a virtual library, resume critique sessions for scannable vitaes, behavioral interviewing tips, business etiquette dinners, dressing for success seminars, and networking workshops.

Check out our interactive WEB page with job bank links (http://www.fiu.edu/~career/).

Locations: University Park, GC 230, (305) 348-2423; North Campus, WUC 225, (305) 919-5770.

Disability Services for Students

Disability Services for Students provides information and assistance to students with disabilities who are in need of special accommodations. Individual services are available to students with visual, hearing, speech, physical, and learning disabilities. Services include counseling, classroom accommodations, adapted equipment, note-takers, readers, interpreters, adapted testing, priority registration, and referrals. Support and assistance in overcoming architectural, academic, attitudinal, and other barriers encountered are provided. Requests for services must be made prior to the beginning of each semester and current documentation of disability is required to receive services.

Location: GC 190, University Park, (305) 348-3532; Wolfe Student Center 139, North Campus, (305) 919-5305; Bldg. 9, Room 224, Broward Program, (954) 948-6793; TTY/TDD 348-3852.

Student Health Services

The Health Care and Wellness Center provides professional health care for routine, non-emergency illness and injuries by promoting health education, wellness programs, and preventive medicine. The Health Care and Wellness Center stimulates student awareness of holistic health behaviors which may be integrated into lifestyle practices to maintain optimal physical and mental health.

Medical services offered at the Health Clinic include routine office visits, physical examinations, family planning consultations, HIV testing, immunizations, laboratory testing, limited pharmacy, nutrition counseling, exercise testing, and private consultations with a physician or nurse practitioner. Referrals are made to local hospitals, pharmacies, and physicians for services not provided at the Health Clinic. Appointments are required. In case of an emergency on campus, Public Safety should immediately be called 24 hours a day.

Office visits are free to students who present an FIU identification card valid for the current semester. Laboratory, immunization, office procedures, and pharmacy services are provided for a nominal fee.

Students may participate in many free health educational programs that stress proactive prevention, including Student Health Advocates for Peer Education (SHAPE), AIDS Peer Educators, and the Student Health Advisory Council (SHAC), fitness testing, EMPOWER motivational diet groups, running/walking club, health fairs, health theme week, and others. The Wellness Media Center health educational resources includes medical textbooks, journals, audiotapes, videotapes, computer interactive software programs, CD-ROM programs, and laser videodiscs.

For more information, please see:

- The Student Handbook
- The "Access Health" 24-hour hotline at (305) 348-5683
- The Health Care and Wellness Center Website at http://www.fiu.edu/~health featuring the popular "Ask Dr. Well B" Interactive (personal health education), information on insurance, immunizations, emergencies, and a variety of health topics, as well as many external links to other health websites, a calendar of "Healthy Happenings" at FIU, and much more!

Location: Health Care & Wellness Center

University Park	
Appointments and Information	348-2401
Administration	348-3080
Immunization	348-2688
Health Education/Wellness Center	348-4020
"Access Health" Line (24 hours)	348-5683
North Campus	
Appointments and Information	919-5620
Immunizations	919-5675
Wellness Center	919-5307

University Housing

University Housing offers a wide variety of accommodations serving over 1500 students at both the University Park and North Miami campuses. Both furnished apartments, as well as a new state-of-the-art traditional residence hall is available.

The traditional residence hall, Panther Hall, opened in the Fall of 1996. This 410 bed fully-furnished residence hall consists of two bedrooms, kitchens, private and semi-private baths, and basic furnishings. Apartment styles include studios, efficiencies, one bedroom, and two bedrooms.

Prices vary depending on the type of unit and campus location, with an average semesterly cost of $1,475.00. Semester rates include all utilities (electric, local telephone service, cable television, and water). All housing agreements are issued for the academic year with summer assignments available. A $150.00 deposit is required at the time of application, of which $50.00 is a non-refundable processing fee. Each residential facility provides easy access to the library, classroom buildings, athletic events, and a variety of on-campus recreation, social and cultural activities. All facilities are staffed with individuals who are trained and committed to providing the student with a living environment that is supportive of their academic pursuits. University Housing's goal is to challenge each resident to get involved and take advantage of the many out of classroom learning opportunities. Living on campus is a critical part of the college experience.

Furthermore, University Housing serves as a liaison between the commuter student searching for housing and community members seeking renters. Current rental listings are available in the Central Housing Office.

Location: Panther Hall (PH) 126, (305) 348-4190; Fax (305) 348-4295; E-Mail: housing@fiu.edu; Website: http://www.fiu.edu/housing

International Student and Scholar Services

International Student and Scholar Services provides assistance to international students, faculty, and researchers in non-immigrant status. The staff provides advising services on immigration, cultural, personal, social, and financial concerns.

The department serves as a liaison to academic and administrative departments throughout the University. An orientation program is offered each semester as well as social and cultural programs to assist students in adapting more effectively to the University community and to living in Miami. An active International Student Club on each campus collaborates with the department in organizing various social activities. Club programs enable students to participate in the international dimension of the University and provide opportunities for involvement in the greater Miami community.

Location: GC 217, University Park, (305) 348-2421; WUC 255, North Campus, (305) 919-5813.

Multicultural Programs and Services

The Office of Multicultural Programs and Services comprises Collegiate and Precollegiate programs. **Collegiate Programs** provide students with personal, academic, social, and cultural support needed for the achievement of educational goals. Staff provide orientation, leadership, development, counseling, career and academic advisement, financial assistance, and tutorials; and serve as a liason to academic units and student support services University-wide. This department also collaborates with student groups in coordinating traditional cultural celebrations, and other activities for minority students.
Location: GC-216, University Park, (305) 348-2436; WUC-253, North Campus, (305) 919-5817.
Precollegiate Programs provide academic enrichment, career planning, and scholarship opportunities to promising minority students at the high school level. Precollegiate programs also expose high school students to the university environment and facilitate their transition to college.
Location: GC-216, University Park, (305) 348-2436.
The office manages two **TRIO** Program Grants. The **Student Support Services Program** is a federally funded program aimed at increasing the retention and graduation rates of first generation college students until they earn their baccalaureate degree. The **Upward Bound** precollegiate program provides supplemental instruction in academic areas, counseling, and life-skills training with the major objective of stimulating interest in attending college.
Location (Student Support Services) GC-216, University Park, (305) 348-2436; WUC-253, North Campus, (305) 919-5817. (Upward Bound Program) GC-225, University Park, (305) 348-1742.

Office of the Ombudsman

The Ombudsman Office acts as an impartial and confidential forum to assist students who have encountered problems or conflicts at the University, particularly problems or concerns not adequately addressed through normal channels. This may include correcting processes or procedures, which are incapable of resolving the issue, or are causing an inordinate delay. The Ombudsman may resolve problems through various methods, including investigation, mediation, or making referrals to the appropriate University department for review. The Ombudsman should be utilized in situations where all areas of appeal have been exhausted or proven unsuccessful.
For more information or services, please contact the Office of the Ombudsman at (305) 348-2797 located in Graham Center 219.

Orientation

Panther Preview, FIU's Orientation program, is designed to introduce students and parents to Florida International University. Orientation sessions are scheduled prior to the Fall and Spring terms. The mandatory two-day program for freshmen includes placement testing, advising, question and answer sessions, and a taste of campus life. The one-day parent program introduces parents to FIU, as well as assists them in preparing for the challenges and changes of parenting a college student. Transfer students are strongly encouraged to attend a half-day Orientation that includes advising, question and answer sessions, and a campus tour. Information about Orientation and related services is mailed to newly admitted undergraduate students prior to the first term of enrollment.
Location: GC 331, University Park, (305) 348-3828; WUC 363, North Campus, (305) 919-5804.

Student Judicial and Mediation Services

The Office of Student Judicial and Mediation Services ensures that the policies and procedures regarding student rights and responsibilities and the Student Code of Conduct which support these rights, can be freely exercised by each student without interference by others.

As members of the University community, students are expected to honor and abide by the policies and regulations of the University and the Florida Board of Regents as well as Federal and State laws and local ordinances. The Office of Judicial and Mediation Services provides an educational forum which supports the academic mission of the University and fosters the personal growth and positive learning experiences of students. Infringements of an academic nature should be directed to the Office of the Provost. All other complaints that are non-academic should be directed to Judicial and Mediation Services. The University reserves the right to review the case of any student who has been implicated in a criminal offense prior to admission, to determine the student's eligibility for admission and participation in extracurricular activities. See the Student Code of Conduct in the Student Handbook for more information on Judicial Services.
Location: GC 214A, University Park, (305) 348-3939.

University Centers

The University Center on each campus provides direct services to students and the University community. The Graham Center (GC) at University Park and the Wolfe Center (UC) at North Campus are the focal points for the University community to meet and interact in a non-classroom, educational environment. Staff in the centers coordinate the scheduling of space and assist with the production of student and University-sponsored events.

As the hubs of University life, the buildings house the offices of Student Government Association (SGA); Student Organizations Council (SOC); The Beacon student newspaper; Faculty Club, and departments of the Division of Student Affairs that provide services to students: Career Services, Counseling and Psychological Services, Office of Disability Services for Students, International Student and Scholar Services, Victim Advocacy Center, Student Advocacy and MCI Centers, Office of Multicultural Programs and Services, Campus Life, Women's Center, Volunteer Action Center, Judicial and Mediation Services, Alumni Affairs and Collegiate Licensing, and the Office of the Vice President for Student Affairs.

The University Centers also offer the services of computer labs, bookstores, cafeterias, grills, vending machines, credit unions, copy centers, automatic banking facilities, auditoriums, lounges, meeting rooms, ballrooms, movie theatres, and game rooms. Other services include; Lost and Found, locker rentals, vending refunds, test preparation courses, and Photo I.D. card.

The Graham Center houses classrooms, an art gallery, the Radio Station (WRGP), TicketMaster, a satellite cashiering office, a food court offering Pollo Tropical, Subway, Mex-Tex, Pizza Hut, Burger King, Edy's Ice

Cream, Smoothie Time Health Food, and a coffee shop. The mini-mall offers a credit union, computer store, convenience store, copy center, bookstore, and travel agency.

The Wolfe Center at the North Miami Campus University Center houses a post office, a theater, and parking services, professional dry cleaning, a credit union, and College for Kids.

The administrative offices of the university centers are located, as follows: GC 104 at University Park (305) 348-2297; WUC 325 at North Miami Campus (305)940-5800.

Victim Advocacy Center

The Victim Advocacy Center provides emergency crisis intervention, on-going support, advocacy, and resource referral to students, faculty, staff, and alumni who have been victims of crime or abuse. The Center provides awareness and prevention workshops and educational programs. A resource library is available for student use at the University Park office. All services are free and confidential.

The Victim Advocacy Center deals with, but is not limited to the following types of victimization: sexual violence, relationship abuse, stalking, assault and battery, hate crimes, sexual harassment, and indecent exposure. Support is also available to surviving friends and family of murder victims. Persons who have experienced incidents of violence, harassment, or abuse are encouraged to seek assistance from the Victim Advocacy Center.

Location: GC 195A, University Park (305) 348-1214; WUC 257, North Campus, (305) 919-5324; Crisis Response Line, 24 hours (305) 348-3000.

Women's Center

The Women's Center offers various programs and services related to the intellectual, social, and professional growth of women. Through collective efforts, the Center advocates for systematic changes that will improve the lives of women and men. Center programming focuses on the particular needs of women students, and encourages women to learn more about themselves, other women, and the environment in which they live. A Women's Mentoring Program exists to promote the professional and leadership success of women students. All other programs are open to the entire community. Services provided by the Center focus on women, and include, confidential referrals, database of scholarships, library and resource files, and opportunities for internships.

Locations: GC 318, University Park,(305) 348-3692 and WUC 257, North Campus, (305) 919-5359.

University Outreach Programs

The mission of University Outreach is to develop and implement quality educational programs and services in partnership with the academic, business, and professional communities. The instructional and academic resources of the University will be extended through innovative approaches including distance learning, alternative scheduling, and community-based academic credit and Professional Development Programs. State-of-the-art technological capabilities offer a high-quality learning environment at the Kovens Conference Center or at a customer's location. A professional and courteous team is dedicated to the highest standards of customer satisfaction. Local, state, national, and international communities will be served with consistent, cost-effective, high quality and distinctive programs and services.

University Outreach carries out its mission to extend lifelong learning opportunities to adult and nontraditional students by providing increased access to University programs. Courses of instruction are developed and offered in a variety of formats. These formats include professional development seminars, short courses, workshops, lecture series, and career training.

Academic Credit Programs

Degree programs and courses for academic credit are scheduled to meet student needs by offering them at times and locations that will increase learning opportunities. More than 200 courses for academic credit are offered annually off-campus in Dade and Monroe Counties. Weekend degree programs for working professionals are offered in collaboration with the University's thirteen colleges and schools. Instruction using telecommunications is offered between campuses, public schools, and other locations with the proper equipment.

An individual, employer, public agency or professional organization may request that a specific course or degree program be offered, and may contract with the University to provide credit courses and degree programs at the work site to benefit a designated group of individuals. Study Abroad courses are also available in several academic disciplines in Europe, Asia, Africa, Latin America and the Caribbean.

Students may register for Outreach credit courses through the traditional registration process at North Campus or University Park. Special registration arrangements are made for students who meet at off-campus sites. For more information on Academic Credit Programs call (305) 919-5669.

Distance Learning

Distance Learning coordinates credit & Professional Development courses through state-of-the-art technology. Students are linked with professors electronically through television, computers, videotape, video conferencing, satellite teleconferencing, and other innovative technologies. Learning can occur in the home, in offices, in the community, or at Adult Education Centers convenient to the learner.

Distance Learning may occur anytime during the day at the convenience of the learner. Some instruction occurs at specific times and in specific locations on and off-campus. Instead of taking time to travel to and from campuses, students with job and family responsibilities may now tailor their academic work to their own busy schedules.

Each Distance Learning course is the equivalent of an on-campus section of the same course as to learning objectives, course content, and transferability. Students must meet stated prerequisites or assessment scores where applicable. Distance Learning courses provides the student a higher degree of scheduling flexibility. For more information about Distance Learning and course offerings, call (305) 919-5217.

Professional Development

Professional Development instruction includes career change and retraining programs, and seminars/workshops for professional development or personal enrichment. Professional Development programs are taught by University faculty or professional experts in a specific discipline. A business, agency or professional organization may also contract to have courses or a certificate program offered for employees at a specified location. Continuing education units (CEUs) may be awarded to eligible participants in non-credit instruction applicable to professional licensing requirements.

Students may register for professional development courses by telephone, Fax (919-5484), mail, or by visiting the University Outreach Office in person. Special registration arrangements are made for students who meet at off-campus sites. Professional Development Courses may be paid by check, money order, Visa, or Mastercard. A catalog of Outreach programs is published each semester and may be requested by calling (305) 919-5669.

Legal Studies Program

University Outreach offers the following Legal Studies programs: Legal Assistant, Legal Secretary, Law and Business Office Management, Immigration and Nationality Law, Medical/Legal Consultant, Family Mediation training, Circuit Civil Mediation training, and other courses for attorneys and paralegals. For more information call (305) 348-2491.

Roz and Cal Kovens Conference Center

The Roz and Cal Kovens Conference Center at Florida International University supports the teaching, research, and public service mission of the University by offering an outstanding conference and meeting environment. Conference Center staff deliver quality meeting planning support services, and programs that meet or exceed the expectations of all internal and external clients of the Center. Whether it is an academic symposium, a governmental assembly, a civic gathering, a professional seminar, an industrial/technological conference or a multinational corporate meeting, the Kovens Conference Center has a full array of University resources, faculty and staff available.

The Center is fully equipped with state-of-the-art telecommunications resources including computer labs, video-conferencing, audio/visual services, and case study rooms. Conferees have access to uplink/downlink satellite transmission enabling them to transmit to and from locations throughout the world. Simultaneous translation capabilities for up to three languages are also available. This exceptional array of communications services can satisfy the needs of the most demanding clientele. For more information call the Kovens Conference Center at (305)-919-5000.

Conference Services

Kovens Conference Center staff are available to help you transform your program ideas into successful conferences, workshops, seminars, institutes, meetings and other related educational activities. Before the program, staff can help with program planning and concept design, coordinate bid preparations, coordinate promotional activities, and coordinate all other meeting logistics. These services are available for off campus conferences as well.

During the program, staff will provide all program support services including directional signs, registration, arrange for required audiovisual, telecommunications, simultaneous translation, computer needs, and issue Continuing Education Units. After the program, staff will wrap-up all conference logistical details, process payment of all invoices, tabulate evaluations, and prepare final financial statements.

For more information, contact Florida International University's Kovens Conference Services staff at (305) 919-5000.

University Outreach Marketing

Outreach Marketing is responsible for promoting lifelong learning programs, and Kovens Conference Center activities. This office provides professional creative and artistic means of publicizing programs and services, including the development and distribution of publications, advertising, and public information. For more information on Outreach Marketing call (305) 919-5669.

University Relations

The Division of University Relations is responsible for coordinating all of FIU's internal and external public relations activities. The division is comprised of five units: Governmental Relations, Press Relations, Publications, University Communications, and Community Relations.

Governmental Relations

Governmental Relations coordinates and represents the University at the federal, state and local levels of government.

Press Relations

Press Relations works with local, national and international news media to help promote the University's image, academic programs, research activities and special events. The office is responsible for disseminating all University news releases and statistical information to the media. The office also produces a monthly public affairs television show, *FIU In View*.

Publications

Publications produces effective and informative publications to advance the University's communications initiatives. The office provides a variety of services including marketing, design, desktop publishing and production. In conjunction with typesetting auxiliary, this office directs and produces university publications, promotional collateral and advertisements.

Communications

Communications manages and develops the editorial content of a wide variety of publications, including the *FIU Magazine* and *FIU Now*, a monthly newsletter. These publications provide information to FIU's key publics, including alumni, donors, civic and governmental leaders as well as students, faculty and staff. In addition, the office provides public relations and editorial services to the University.

Community Relations

Community Relations strengthens ties between FIU and the community through planning and coordinating major university events. The office also assists in hosting visiting dignitaries, assists other University units planning events, and coordinates FIU's participation in community events.

Intercollegiate Athletics

FIU is a member of the National Collegiate Athletic Association (NCAA), and the Sun Belt Conference for men and women. The University has competed at the Division I-AAA level since September of 1987, having competed successfully at the Division II level since 1972. Programs and services in Intercollegiate Athletics provide an opportunity for student-athletes to develop as skilled performers in an educational setting. Much emphasis is placed on the student as a student-athlete to ensure intellectual, emotional and social well being.

Athletics

Athletic team membership is open to all full-time students, who meet NCAA eligibility requirements and are enrolled in 12 credits.. Women's programs consist of basketball, volleyball, soccer, golf, tennis, track, softball, and cross-country. Men's programs consist of basketball, soccer, baseball, golf, tennis, indoor and outdoor track and cross country. To be eligible for intercollegiate competition, the University requires each student-athlete to be in good academic standing and make satisfactory progress toward a degree. Team membership is determined in a manner which does not discriminate based on race, sex, national origin, marital status, age or disability.

Financial assistance is available to both freshmen and transfer students recruited for all 17 athletic teams. Assistance may include grants, scholarships, loans or self-help programs. To be eligible for financial assistance, each student-athlete must be in good academic standing and make satisfactory progress toward a degree.

Campus Recreation

The Intramural Sports Program is designed to provide a healthy, safe, and competitive outlet for students, employees, and alumni of Florida International University. The goal of the intramural sports program is to ensure that all members of the FIU community have an opportunity to participate in some type of recreational sports activity as regularly as his or her interest, ability, and time will permit. Through participation in the intramural sports program individuals are able to enjoy organized sports, have fun, and keep physically fit, meet people, cultivate leadership abilities, and put to good use various learned skills. Values such as sportsmanship, fair play, and mature behavior are stressed and encouraged.

Leagues and tournaments are offered in flag football, softball, soccer, basketball, volleyball, racquetball, bowling and tennis, billiards, floor hockey and mini golf.

Athletic and Recreational Facilities

The Golden Panther SportsPlex encompasses four facilities that serve as the sites for athletic, educational and recreation activities.

The Golden Panther SportsPlex is a multi-purpose facility. There is a seating capacity for special events of 5,000. It contains racquetball courts, basketball and volleyball courts, classrooms and locker rooms. The arena is open to students, faculty, staff, and alumni with valid identification.

The Golden Panther Baseball and Soccer Stadiums are the home to our intercollegiate men's and women's programs. Both stadiums are lighted. The baseball stadium seats 1,000 and the soccer stadium seats 1,500.

The FIU Community Stadium is a Football and Track facility. The stadium is also home to our intercollegiate men's and women's track and field programs. In the fall, Miami-Dade County Schools play many of their high school football games in this facility.

The FIU softball stadium has been upgraded by over $150,000 in renovations the past two years. It is the home to both the Golden Panther softball team and intramural play.

FIU students are admitted to all regular season intercollegiate athletic home events free of charge. Presentation of a valid University identification card is required.

Please call the following numbers for additional information: SportsPlex Facilities 348-3258; Golden Panther Box Office 348-4263.

Fitness Centers at University Park and North Campuses are equipped with a complete line of Nautilus machines and locker rooms. The Centers are available at no cost to currently enrolled students with valid identification cards. There is a semester fee for faculty, staff, and alumni.

The Aquatic Center on the North Campus overlooks the bay and is fully furnished to provide an environment for conversation, study and/or sunbathing. The multipurpose design of the 50 meter x 25-yard pool and diving well allow for recreational and instructional use.

The Racquet Sports Center at University Park has 12 lighted tennis courts and eight-lighted racquetball courts. The Racquet Sports Center at North Campus has six lighted tennis courts, along with a sand volleyball court. Both campuses have full-sized basketball courts near their Racquet Sports Centers.

For additional information or hours of operation call:

Campus Recreation: 348-2951 University Park, 919-4571 North Campus.

Fitness Center: 348-2575, University Park; 919-5678, North Campus.

GPA Open Recreation: 348-2900.

Racquet Sports Center: 348-2951, University Park; 919-4572, North Campus.

Aquatic Center: 919-4595.

Centers and Institutes

Jerome Bain Real Estate Institute

The Jerome Bain Real Estate Institute, a partnership between Florida International University's College of Business Administration and the Realtor Association of Greater Miami and the Beaches, exists to create value for real estate firms and the real estate industry through its educational, research, and service activities. It is fast becoming a premier, University-based real estate educational and research center, known for its exceptional expertise in international real estate transactions.

The Center supports the College's undergraduate academic major in real estate and is developing a graduate program in the field as well. Graduates have a solid grasp of issues facing the industry and of real estate business theory and practice.

The Center also sponsors theoretical and applied research on real estate topics and issues and supports faculty research in this area. It is a repository for data related to real estate markets and issues and periodically issues information on current market characteristics and future market conditions.

The Center offers management training seminars, symposia and conferences on topics of interest to professionals in the real estate industry. It also coordinates the provision of educational programs relating to certification and the continuing education needs of real estate professionals.

The Institute is located in the Ryder Business Building, University Park Campus, (305) 348-2771.

Center for Accounting, Auditing, and Tax Studies

The Center for Accounting, Auditing, and Tax Studies (CAATS) conducts and sponsors innovative research. Major ongoing projects focus on the audit impact of emerging technology and on detection of fraud.

CAATS builds bridges to practitioners by turning ideas into products; it enhances the value of accountants' services to clients and to the public by contributing to audit efficiency and effectiveness. CAATS' international commitments relate to the accounting issues confronting the less developed nations, particularly in the Middle East and Latin America.

CAATS also conducts seminars and short courses designed to provide educational opportunities to South Florida public accountants, internal auditors, and management accountants. CAATS strives to be self supporting. Net fees earned by providing educational opportunities to accountants, together with contributions received from the public, are applied to research and to the enrichment of graduate instruction. In this way, CAATS provides the margin of excellence which enriches the entire educational experience.

All CAATS activity is dedicated to advancing accounting, auditing, and tax knowledge. CAATS is located in BA 245B, University Park, 348-2586.

Center for the Administration of Justice

The Center for the Administration of Justice (CAJ) was founded at Florida International University, a member of the State University System of Florida, in 1984 to engage in research, training and public education about the administration of justice in Latin America. With offices in Miami and San Jose, Costa Rica, CAJ has become a unique international resource at the forefront of justice sector reform in Latin America.

CAJ employs a multidisciplinary and international staff of specialists, including lawyers, political scientists, public administrators and public policy analysts. Many are former justice sector officials with experience and skills in justice sector issues.

Giving special emphasis on support to local efforts to strengthen and invigorate fair and independent justice systems, the CAJ regularly works with public officials, scholars and practitioners in Latin America.

The CAJ has become a leading source of information and leadership on justice sector reform issues in Latin America. Its assessments have been widely disseminated and have been critical in public policy decision-making throughout the region.

Center for Advanced Technology and Education (NSF-CATE)

Introduction

The NSF-funded Center for Advanced Technology and Education - CATE provides a computing environment capable of engaging researchers as well as facilitating classroom and laboratory-based instruction in critical technology areas. CATE constitutes an infrastructure that is viable for cutting-edge research activities providing an environment that enhances the potential for: (a) Parallel and distributed processing, (b) high performance 3-D graphics for simulation, rendering and modeling, (c) real-time processing capability, (d) operating systems, graphics and software development that meet current standards, and (e) high-speed data acquisition, playback, and analysis.

Research Areas

- Image Processing and Computer Vision
- EEG-Based Imaging
- Robotics
- Real-time and Multidimensional Signal Processing
- Confocal Microscopy
- Flow Cytometry
- Human-Computer Interface Research

Main Equipment

- ESI-256 System, an Electrical System Imaging as a Human-Computer Interface for Brain Research
- Onyx supercomputer for true supercomputing and Graphics power
- Confocal Microscope for RCM 8000 real-time confocal microscopy for time-varying 3-D imagery.
- Coulter EPICS Profile II Cytometer for measuring light scatter (fluorescence or laser) of microscopic particles.
- Nomadic Mobile Robot (Nomad200) with integrated sensory modules.
- Workstations with 22 Indys, 11 Pentium PCs

Human Resources

Director: Malek Adjouadi, Ph.D.
Manager: Patricio Vidal, M.Sc.
Support Staff: Julio Blandon, Erika Suarez, Luz Camacho, Claudia Rodrigues
Faculty: Armando Barreto, Ph.D., James Story, Ph.D.; Gustavo Roig,

Ph.D.; Wunnava Subbarao, Ph.D.; Ana Pasztor, Ph.D.; Maria Martinez, Ph.D.; and Julie Jacko, Ph.D.
Student Support: 9 Graduates and 5 Undergraduates
NSF Fellows: Sonia Duranza, 1996-1999; Annette Tabemer, 1997-2000; and Erica Suarez, 1998-2001

Center for Banking and Financial Institutions

The College of Business Administration at Florida International University has a long tradition of preparing students for careers in banking and financial institutions. The Center for Banking and Financial Institutions was established to provide additional services to banks and financial institutions in the southeastern United States, in Latin America, and in the Caribbean region. Through the Center, associates in such specialties as accounting, finance information systems, marketing, and human resource management apply their respective functional expertise to address contemporary issues in the banking and financial service industries.

The Center for Banking and Financial Institutions meets the demands of the banking and financial services sector through its educational, management development, research, and consulting activities.

The Center, along with the College of Business Administration's Department of Finance, offers a short-course program leading to a Certificate in Banking.

The Center also conducts high-quality management training seminars and conferences on a host of topics of interest to banks and financial institutions. These topics range from consumer and commercial lending to credit analysis to Bank Security Act compliance to foreign trade financing. The Center also provides customized in-house training programs for institutions wanting a more individualized and focused approach.

The Center supports both theoretical and applied research on issues in the financial services sector. Research results have been presented to government agencies like the Federal Reserve Bank, provided to professional organizations like the Financial Management Association, and published in academic journals like the *Journal of Financial and Quantitative Analysis*. The Center also has produced research reports for specific organizations, like Citicorp International and the Miami International Airport. The Center's research on international trade has gained worldwide media attention.

The Center serves as a consulting, clearinghouse and resource for banks and other financial institutions wanting to find experts to help them solve their unique organizational problems.

The Center for Banking and Financial Institutions is located in the Ryder Business Building, University Park Campus (305) 348-2771.

Center for International Business and Research

Established in 1995 and housed in Florida International University's College of Business Administration, the Center for International Business and Research (CIBER) exists to promote teaching, research, and outreach aimed at helping students, faculty, and businesses identify and address the challenges posed by a global economy. More specifically, it seeks to internationalize these stakeholders in order to improve the competitiveness of U.S. firms in world markets.

The Center supports the international focus of the College's academic programs and the University's language-oriented courses. It provides a Certificate in Latin American Business Spanish and, with the University's Department of Modern Languages, offers "Languages for Business" courses in Spanish, French, Japanese and Chinese. It also sponsors an international business course for local high schools and a study-abroad program for students.

The Center supports the College's thematic research on international competitiveness, human resource management, logistics, entrepreneurship, ethics, and environmental compliance. It has coordinated research to support Miami-Dade County's "One Community, One Goal" economic development plan. It sponsors the "Faculty Development in International Business—South America" study tour for faculty. In addition, the Center publishes an annual "Working Paper Series" describing its research projects for the year.

The Center's outreach activities include its Western Hemisphere Business Outlook project, its Global Public Affairs Project, its International Business Forums, and its Executive Guest Speaker series.

The Center is located in the Ryder Business Building on the University Park Campus, (305) 347-1780.

Center for Urban Education and Innovation

Created in 1998 and contextualized within the mission of the College of Education, the vision and scope of the Center for Urban Education and Innovation is three-fold: first, to participate, both proactively and in partnership with other educational and human service organizations, in the process of developing the professionals and programs capable of dealing more efficiently with the existing and rapidly changing reality that confronts our schools and communities, especially as that reality affects the performance, growth and achievement of children and other at-risk populations in urban settings; second, to address the possibilities, dilemmas and contradictions involved in altering and improving the urban reality; and third, to discover and disseminate the knowledge and perspectives required to improve the quality of life in schools and communities currently being challenged by, subjected to and undergoing acute social change.

More specifically, the Center's mission involves:

- Becoming directly engaged in addressing the challenges of urban education through the development, implementation, evaluation, replication and generalization of collaborative programs with the Miami-Dade Public Schools, the Broward County Public Schools and other South Florida human service agencies;
- Developing specific educational initiatives to support the goals and objectives of America 2000: (1) Readiness to Start School; (2) Increased Graduation Rates and Readiness for Postsecondary Education and Employment; (3) Enhanced Student Academic Performance; (4) Schools Environments Conducive to Teaching and Learning; (5) Learning Environments that are safe and supportive of Student Needs; (6) Increased Professionalism of Teachers, Administrators and other Educational Personnel; and (7) Greater Adult Literacy;
- Utilizing its expertise and resources, especially the program development and research leadership talents of its Eminent

Scholars, to create and assess innovative educational programs aimed at enhancing pre K-12 student performance (individual empowerment), building bridges between people and cultures (interconnectedness, and improving the human condition (social change);

- Addressing the unmet educational needs and aspirations of historically underserved populations: the poor, minorities, women, adult learners, the elderly, and the physically, mentally and emotionally challenged; and
- Become leaders and effective participants in the process of both shaping the national conversation concerning urban education and developing progressive public policy in the areas of education and human welfare.

The Center for Urban Education and Innovation will purposefully and uncompromisingly serve communities in which educational change and survival are inextricably tied to each other. By directly serving the community, the Center for Urban Education and Innovation will itself become a model for a new generation of such centers, each a focused action-research setting committed to generating new and useful knowledge by both addressing itself to meeting educational needs and solving real and pressing problems in the communities of which we are a part and to which we bear a special relationship.

Center for Youth Development (CYD)

The Center for Youth Development (CYD) located at University Park Campus is a multidisciplinary institution founded to conduct research aimed at the improved understanding and prevention of health-risk behaviors and environments that impair the healthy development of urban youth. In pursuing this goal, the CYD emphasizes understanding individual development as it occurs in diverse contexts including families, peer groups, schools, communities, and different cultures. The CYD is aimed at integrating ongoing research prog-rams and training opportunities with the application and evaluation of youth-focused prevention/intervention programming in community settings. As a multidisciplinary forum for researchers and health professionals, the CYD pools substantial resources in terms of the vast array of conceptual perspectives, research methodologies, and intervention modalities exemplified by its members. These resources are critical for investigating how changing relations between youth and the settings in which they live influence their health-risk behaviors and related outcomes.

Researchers and practitioners associated with the CYD strive to share and integrate knowledge about the health behaviors of at-risk youth. Similarly, the CYD provides opportunities for collaboration and sharing of appropriate and effective health-related methodologies, e.g., with regard to assessment, intervention, or evaluation. One premise of the CYD is that social issues rooted in the health behaviors cannot be understood unless the social ecology that forms the context for the behaviors is also a focus of inquiry. Therefore, it is essential that our multidisciplinary network of health professionals not simply collaborate amongst ourselves, but that we also actively collaborate with the people who participate in our research, those we profess to serve. It is critical to integrate their perspectives when we seek to understand or to change risk behaviors. In addition, our success in implementing interventions and maintaining positive change depends upon active outreach into local communities and recruiting community members as collaborators in the assessment, intervention, and evaluation phases of research. Therefore, a third premise of the CYD is that to maintain positive changes in the communities served by FIU, the CYD has a responsibility to train students to go back into their communities as agents of change. Through the CYD, FIU students will help to implement research and intervention programs, disseminate health-related research into local communities, act as mentors for at-risk youth, and begin to form a community-based network of professionals who potentially will serve as links in continuing collaborations between FIU and local communities.

Faculty interest in the problems of youth has been the impetus for the formation of the CYD. Faculty associated with the CYD have active programs of research that involve publishing articles in relevant journals and pursuing extramural funding initiatives. In addition, CYD members teach a wide array of classes focusing on the lives of at-risk youth.

The CYD has expanded collaborative relationships to include community based foundations in order to provide the CYD with community contacts and access to settings throughout Miami (e.g., halfway houses, schools, detention centers) necessary to conduct rigorous health-related research among at-risk youth. These links to the community, via these foundations and its intervention programming, will provide opportunities for training hundreds of FIU students each year, actively involving them in reducing social problems among urban youth. As FIU students acquire research and service experiences via community outreach, students: a) become invested in the well-being of local communities; b) make more continuous transitions to work following college; and , c) serve as a network of continuing contacts between FIU and local communities.

For more information, call (305) 348-3341, or write to Dr. Lilly M. Langer, Director, Center for Youth Development, University Park DM 217, Miami, Florida 33199. Email: langerl@fiu.edu

Children's Creative Learning Center

The Children's Creative Learning Center at FIU is an Educational Research Center for Child Development affiliated with the College of Education.

The Center offers an educational Preschool program to children between the ages of 2 years and six months (toilet trained) through 5.

The programs are designed to meet the needs of children Monday through Friday, from 7:45 a.m. to 6:00 p.m.

Since its inception in 1975, this model program has become well known for providing appropriate hands-on experiences for children of students, faculty, staff, alumni and the neighboring community.

The educational pre-school program offers a creative atmosphere which enhances and promotes involvement in activities, such as: circle time, story time, art, music, science, cooking, dramatic play and pre-reading and pre-math and developmental tasks along with the introduction of educational concepts to convey awareness of the world around us.

For more information and application, please call us at 348-2143.

Institute on Children and Families at Risk

The Institute on Children and Families at Risk was established by the School of Social Work at Florida International University in 1991. The Institute promotes research, demonstration projects, training, and technical assistance to address the needs of children, youth, families, and the social networks and systems that support them. With an emphasis on prevention, early intervention and major reforms in crisis and out-of-home care, the Institute has generated a series of multi-cultural, multi-generational and multi-modal initiatives. These include training and instructional design for child welfare workers in South Florida.

Research and capacity-building functions of the Institute encompass a range of family support strategies including family-support villages, refugee, immigrant and migrant service initiatives, services and systems integration, consumer-driven practice and policy, community campaigns for culturally-responsive services and missions, and refinancing strategies. The Institute also designs and evaluates improvements in 'helping' technologies for all service systems supporting at-risk children, families and communities.

Emphasizing partnerships at the local, state and national level, the Institute collaborates with a number of institutions, organizations and sectors to promote technology transfer, joint demonstration projects and capacity-building efforts. Special emphasis is on the link between universities, public sector social health services and public schools. The Institute provides consulting services both nationally and internationally with a focus on the training and technology transfer between states and nations on techniques and strategies to better organize services and supports for at-risk children, families and communities.

The Institute also serves as the research and development arm of the School of Social Work and provides research opportunities for master's and doctoral-level students. Its cross-systems endeavors also depend on the leadership and expertise of faculty and students in other disciplines at Florida International University, at several other universities in the South Florida area and the staff of the State of Florida's Department of Health and Rehabilitative Services staff.

Drinking Water Research Center

The Drinking Water Research Center (DWRC) was established by the Florida Legislature in 1977, and charged with the responsibility for applied research on the state's drinking water. Since that time, the Center has responded to state, national and global environmental concerns by expanding its research focus to cover a wide spectrum of water-related environmental issues.

The research activities of the DWRC includes the following:

Water Treatment-evaluating treatment processes; evaluating alternative disinfectants and their effect on water quality; researching the use of high energy electrons in water, wastewater and hazardous waste treatment.

Surface Water · Quality-studying treatment of domestic, industrial and hazardous wastes since improper disposal can affect surface water quality.

Ground Water Quality-studying ground water movement; investigating water management modeling of the Everglades Basin.

Marine Environment-oil spill shoreline protection and counter measures.

The DWRC conducts training and educational seminars and workshops in the area of water treatment, new methods for water analysis, and drinking water regulations. Qualified students often have opportunities to work as research assistants in the DWRC laboratories or carry out independent research projects. Cooperation and interchange with other departments in the University is stressed.

The Center is part of the College of Engineering EAS 2330, (305) 348-2826.

Center of Economic Research and Education

The Center of Economic Research and Education is a Type II Center approved by the Board of Regents of the State University System. The purpose of the Center is to foster a greater understanding of economics. The Center represents an important link between the University, business, and education communities. As part of its activities, the Center undertakes research projects, sponsors conferences and seminars, provides courses in economic education for teachers, and disseminates economic data and information.

Established in 1982 as one of eight centers located throughout the State University System, the Center is located in DM 319B, University Park. Its phone number is (305) 348-3283.

Center for Educational Development

The Center for Educational Development (CED) is a multidisciplinary unit based in the College of Education whose mission includes: (1) planning, technical assistance, training and research in support of educational systems development internationally and domestically; (2) increased minority group access to and achievement in educational systems; (3) acquisition of state and external resources for development of educational systems; and (4) multi-institutional collaboration in educational development projects and research.

The Center is governed and supported jointly by Florida International University, Miami Dade Community College, and the University of Miami. It is comprised of two specialized institutes: the International Institute of Educational Development and the Urban Educational Development Institute.

For more information call (305) 348-3418, or write to Dr. Miguel A. Escotet, Director, International Institute of Educational Development, College of Education, University Park Campus, Miami, Florida 33199. E-Mail: iide@fiu.edu

Elders Institute

The Elders Institute, a continuing education unit within the Southeast Florida Center on Aging, serves the educational needs of senior adults at the University's North Campus. The Institute's mission and scope is to initiate, plan, design, and manage non-credit short courses, lectures, seminars, and workshops for older learners. Programs are offered during daytime hours, and are held primarily on campus. The courses offered are primarily in the humanities, the behavioral sciences and the social sciences. Workshops and seminars provide opportunities to develop new skills and to explore methods and means for personal growth and self-improvement. The Institute's instructional staff are community experts, University faculty and retired seniors. The participants are motivated learners who seek knowledge, new information and skills for intellectual stimulation and personal growth.

The Elders Institute at Coral Gables offers non-credit continuing education courses for older adults, in Spanish and English, at St. Mark's Lutheran church. The Institute is located at the Roz and Cal Kovens Conference Center 302, North Campus, (305) 919-5910.

English Language Institute

Since 1978, the English Language Institute (ELI) has offered non-credit English language instruction to non-native speakers of English in the community and from abroad.

Intensive English Program: Classes in reading, grammar, writing, and conversation are taught at six levels of proficiency. Language laboratory facilities are available in which students can increase their listening comprehension and speaking skills under the guidance of an instructor. Students normally take a full, three-course load, but it is also possible for fully admitted University students to take a course in a single skill.

Testing and Placement: The English Language Institute offers proficiency testing of both written and oral proficiency in English as a support service for academic units throughout the University. Evaluative procedures are designed to fit the needs of individual programs or schools, to assist them in the identification of individual students' level of proficiency in English, and to place students in appropriate programs of study when needed. In addition, the Institute regularly administers the Test of English as a Foreign Language (TOEFL).

Community Outreach Program: The English Language Institute offers non-credit courses in the evening and on Saturday for non-native speakers of English.

Accent Reduction: Accent reduction classes are available for non-native speakers of English who have a good command of the language but who wish to improve their pronunciation.

Other Programs: Business English, Super Intensive (immersion), Summer Institute.

The English Language Institute is located in LC 204, University Park, (305) 348-2222.

The Family Business Institute

The Family Business Institute was created to provide an on-going series of small, personal, in-depth seminars focusing on challenges faced by mature family business owners, their family, and their non-family staff. A newsletter augments the educational programs. The following corporate sponsors are partners dedicating their resources toward supporting health family businesses: Arthur Andersen LLP, Greenberg Traurig and The Equitable Musibay/Chiappy Agency, Nations Bank, Gerson, Preston & Co.

The Family Business Institute is located in BA 332, University Park Campus, (305) 348-4237.

FAU-FIU Joint Center for Environmental and Urban Problems

In response to environmental and urban issues, the Florida Legislature established the Joint Center for Environmental and Urban problems at Florida International University and Florida Atlantic University in 1972. In many years since then, the Joint Center has been involved in the formulation of most of Florida's growth management laws and policies.

The Joint Center is an applied research center that conduct studies on urban and environmental issues and provides public services to government agencies and non-profit organizations. The Joint Center's FIU Office specializes in economic development, urban revitalization, community development, housing, and growth management in South Florida. It is dedicated to conducting high-quality interdisciplinary research and in facilitating collegiate cooperation among FIU and FAU faculty and researchers.

Since 1998, the Joint Center's FIU Office moved to downtown Miami and is located in the new Metropolitan Center (150 SE 2nd Avenue, suite 1201, Miami, Florida 33131). It established a new collaborative relationship with the College of Urban and Public Affairs that allows the Center shared resources with the College's metroploitan Center. This arrangement also brings faculty specializing in urban policy, program evaluation and economic development to the Center's project. The FIU Office is staffed by an associate director and several doctoral research assocaites.

Research and Services

Research at the Joint Center's FIU Office focuses on economic development, inner-city revitalization, and other growth management issues. The Joint Center is committed to assisting government agencies and community based organizations in formulating their planning and development programs. Recent clients included the Florida Department of Community Affairs, Miami-Dade Metropolitan Planning organization, City of Florida City, Miami-Dade Transit Agency, and the South Florida Housing and community Development Coalition.

Working with the Metropolitan Center, the Joint Center's FIU Office just completed a project on transportation needs in welfare reform. It also participates in the Federally funded Community Outreach Partnership Center program to provide technical assistance to community development corporations in Miami-Dade. It also entered into an agreement with the South Florida Housing and Community Development Coalition to develop land and economic study of the 79th Street Neighborhood Initiative. Currently, the FIU Office just started GIS project on welfare-to-work with the Miami-Dade Metro-politan Planning Organization. It is also developing a project with the Lincoln Institute to examine the Community Councils under a two-tier zoning system in Miami-Dade.

Because of the shift of focus toward economic development and urban revitalization, the Joint Center's FIU Office discontinued its internship program with the South African Institute of Twon and Regional Planners. Instead, internship is established for local students who are interested in economic development.

Future Aerospace Science and Technology Center for Cryoelectronics (FAST)

FAST is one of five centers created by the Air Force as part of its minority university enhancement program, providing research experience opportunities for undergraduate and graduate students in the area of Electrical Engineering.

The FAST Center evaluates novel applications of space-based cryo-electronics, initially studying new systems for reduction in losses of feed and phase shift networks in phased array transmitter systems. This involves development of low-loss active integrated low-noise phased array or post-processed phased array down-converter receiving systems, high gain-low loss, low noise micro (and later millimeter) wave circuits and systems for space based applications. Of particular interest is the ability to

design and fabricate integrated systems which could be used as "steerable" phased array antennas with, some frequency-agility as well.

Current research is focused on issues relating to: integration and hetero-epoitaxy of the buffer and dielectric layer with the GaAs semiconductor and 123 high T_c superconductor layers; obtaining good ohmic GaAs contacts at low temperatures, tailoring the surface morphology of the high T_c superconductor to achieve a designed Q value for the passive elements, package design and testing with respect to microwave and thermal cycling consideration, and the identification and minimization of noise sources.

The FIU Institute of Government

Since 1982, the Institute of Government, as part of the College of Urban and Public Affairs has provided training, technical assistance, consulting services, policy forums and executive leadership development programs to municipal, county, and state administrators, staff members, appointees, and elected officials in Dade, Monroe, and Broward Counties. This program draws the university together with the community in which it resides, and couples ideas and skills from many disciplines with working governments.

The Institute is primarily funded through a state grant with the Florida Institute of Government located in Tallahassee. There are 15 Institutes of Government affiliated with state universities and community colleges around the state.

Upon request, the Institute develops and delivers specialized training for governmental units to address specific needs they have identified. The training is developed in consultation with the clients and can be delivered at their site or at the University. The Institute offers a workshop series for career development for governmental staff as well.

The Institute also holds conferences and workshops as a forum for community discussion about and analysis of policy issues of concern to local governments and state departments in the South Florida area.

Technical assistance and applied research services are also provided for a wide variety of units and divisions within state and local governments. Issues which may be addressed include public management, public policy analysis, and service delivery systems.

The Institute and the Department of Public Administration conducts the Executive Development Program for mid-level career public and voluntary sector managers. This certificate program emphasizes problem solving and decision making in government and the voluntary sector, personal growth, career development and state of the art management tools. Community and government leaders as well as FIU faculty serve as Adjunct Faculty in the Program and participate in panel discussions relating to the aforementioned topics. Participants in the program are also linked with upper-level public administrators and elected officials to provide personal and professional growth and mentoring.

The Institute arranges technical assistance and consulting services when governments feel they would benefit from outside support. They might, for example, be seeking to solve an internal problem, to gather and analyze research data pertinent to their operation, or to carry out an evaluation of some segment or all of their operation.

Topics in the past have included "Right-Sizing Government", "The Homeless Problem", "Decision Making in the Aftermath of Hurricane Andrew", and "Florida Sunshine Laws".

The Institute holds conferences and workshops as a forum for community discussion about and analysis of policy issues of concern to local governments in the South Florida area.

The Institute develops and carries out executive leadership development through a number of programs, such as, the annual Executive Leadership Development Mentoring Program. This program links upper-level public administrators and elected officials with less-experienced administrators and officials, in a year-long program starting each fall, to provide personal and professional growth for each individual.

Recently, (1997), the Institute also created the Academy for Strategic Management which focuses on training high level senior managers in strategic planning, benchmarking, performance measurement, contract management, etc. Over 150 upper level managers have already gone through the program.

Finally, the Institute sponsors a certificate program for Community Oriented Policing largely taken by law enforcement officials.

The Graduate Diploma Series Program

(formally Center for International Executive Education, CIEE)

The Graduate Diploma Series (GDS) Program is offered under the auspices of *The Center for Management & Executive Education.* The GDS Program offers students who have completed a Bachelor's degree a comprehensive "executive development" experience toward successful application in the business environment. Students may enroll in one of two tracks: International Business Management or International Marketing. The GDS Program provides students with a collaborative learning environment where professors facilitate practical application of material through interaction with business and industry. Upon completion of a specific GDS Program, students will receive a certificate from *The College of Business Administration.*

High Performance Database Research Center (HPDRC)

HPDRC Mission Statement

The High Performance Database Research Center (HPDRC) conducts research on database management systems and various applications, leading to the development of new types of database systems and the refinement of existing database systems.

The HPDRC, a research division of the Florida International University School of Computer Science, has a strong commitment to training graduate students and preparing them for their future roles as scholars and specialists employed by industry.

Government agencies and industry fund the HPDRC. At $4 million, NASA currently provides the largest amount of money for the Center. Other sponsors include: National Science Foundation ($2.5M), U.S. Department of Defense (BMDO, ARO, USAF, and DISA), U.S. Department of the Interior, U.S. Information Agency, NATO, Florida Department of Commerce, Florida Department of Education and Industry.

HPDRC Research Scope

The HPDRC flagship project is a highly parallel database system based

on the semantic/object-oriented approach. Our system:

- provides exceptional usability and flexibility
- allows shorter application design and programming cycles
- gives the user control via an intuitive structure of information
- empowers the end-user to pose complex ad-hoc decision support queries
- provides superior efficiency through a high level of optimization transparent to the user
- allows a manifold reduction in storage size for many applications (such as Data Warehouses)
- is fully internet compatible

The Center also conducts research on such theoretical and applied issues as internet-distributed heterogeneous databases, database design methodology, database design tools, information analysis, multi-media database languages, data compression, spatial databases, and visualization.

In addition, the Center designs specific database systems for highly complex applications. We are presently developing database systems for the Everglades National Park and NASA that are intended for storage and processing of large amounts of earth science observations.

FIU's Regional Applications Center is a division of the HPDRC chartered by NASA for the purpose of data ingestion from satellites, enhancement of data, and distribution of data to users via internet queries and otherwise.

More information about HPDRC is available at the University Park Campus, ECS 243, (305) 348-1706. fax: (305) 348-1705, e-mail at hpdrc@cs.fiu.edu or visit our website at http://hpdrc.cs.fiu.edu

Knight Ridder Center for Excellence in Management

The Knight Ridder Center for Excellence in Management within Florida International University's College of Business Administration exists to identify and promote best business management practices among its students, faculty, alumni, and among the international academic, business, and professional communities it serves.

The Center develops academic programs focusing on enterprise development within the global economy. It coordinates the College's EDGE-EMBA, an executive MBA program for enterprises that emphasizes an interdisciplinary curriculum, a global perspective, project implementation, and adding value to the enterprise. In addition, the Center sponsors seminars and conferences that address topics related to excellence in management.

The Center sponsors and promotes faculty development and research in the area of management excellence and best practices and provides funding for some of this research through its summer grant program.

The Center's service and outreach activities include business seminars, executive roundtables, and consulting.

The Center is located in the Ryder Business Building, University Park Campus, (305) 348-6843.

Children and Families Professional Development Center

The Children and Families Professional Development Center (PDC) at FIU is responsible for providing the staff of the Florida Department of Children and Families, Division of Family Safety and Preservation, with a functional knowledge and practical skills base for working with children and families. Located on the North Campus, the PDC is staffed by a credentialed and experienced group of instructors who provide training to child protection workers throughout a geographical area that extends from Vero Beach to Key West.

The PDC provides the entry-level foundations of child protection knowledge and skills to ensure that new staff have basic competencies in the practices, policies, and procedures that are essential to the Family Safety and Preservation program. In addition, the PDC offers specialty inservice training to develop and increase competencies for experienced Children and Families staff as well as the staff of private providers of child protection services. The overarching goal of the PDC is to enable all providers of services to children and families to make better casework decisions that result in improved outcomes for the citizens of Florida.

Hemispheric Center for Environmental Technology (HCET)

The Hemispheric Center for Environmental Technology (HCET) was established by Florida International University and the United States Department of Energy to research, develop, and demonstrate innovative environmental technologies and to establish international alliances to facilitate the implementation of these technologies.

HCET's research and development (R&D) activities focus on the decontamination and decommissioning (D&D) of nuclear facilities and the management and reduction of radioactive and hazardous wastes. These R&D activities support the Department of Energy-Environmental Management (DOE-EM) programs in the areas of waste characterization, monitoring, and sensor technology; underground storage tank remediation; and decontamination and decommissioning.

HCET's vision is to become a model bridging institute in the Western Hemisphere for the diffusion of environmental technologies that promote mutual economic benefit and sustainable development in the United States, Latin America, and the Caribbean. HCET's mission is to develop and market technologies to solve environmental problems and foster sustainable development throughout the Americas. To achieve this end, HCET performs research and development, gathers and disseminates market and technology assessment data, facilitates technology transfer, and forms partnerships with industries and governments throughout the Americas. HCET targets its technology transfer capabilities to environmental technology development organizations and industrial users of environmental technologies.

The foundation for HCET's technological capabilities has successfully been built within Florida International University's College of Engineering and Design. HCET has the capability and resources to develop innovative technologies as well as assess and demonstrate technologies that have been developed or modified both in-house and by other vendors. HCET also has the expertise to comparatively evaluate emerging technologies and pursue, organize, and facilitate technology transfer from suppliers to consumers.

HCET is equipped with state-of-the-art equipment and machinery to carry out its project goals. HCET's facilities include:

- Open-Air Technology Assessment Site for conducting large-scale technology assessments.

- Hazardous Materials Laboratory housing state-of-the art rheology equipment, with the capacity to perform specialized analytical and engineering activities.
- Fully-equipped Analytical Laboratory to define the chemistry and characterization of waste tank forms, evaluate contaminates in groundwater and soil, and monitor air quality levels.
- Computational Fluid Dynamics facilities applying CFD techniques for modeling and analyzing the fluid flow and heat transfer in engineering systems.
- Fabrication Shop capable of performing lathe operations, two dimensional CNC milling, precision drilling and cutting, welding and woodworking.
- Experimental Facilities for characterization, monitoring, and sensor technology allowing low and high temperature study, single and two-phase flow, heat transfer and phase change, as well as sintering.

HCET recently opened an office in Oak Ridge, Tennessee, to pursue new research and development opportunities in legacy waste management, materials recycling, and site reutilization.

International Forensic Research Institute (IFRI)

The International Forensic Research Institute (IFRI) was established at Florida International University (FIU) by the State University System (SUS) of Florida Board of Regents (BOR) in 1997 to help serve law enforcement efforts in the application of scientific principles to the adminstration of justice. Dozens of institute affiliated faculty conduct forensic research in various departments including Biology, Chemistry, Criminal Justice, Medical Laboratory Sciences, Physics, Political Science and Psychology, as well as involving research scientists from some of the world's foremost forensic science laboratories. Based out of the chemistry department, the institute administers an undergraduate Forensic Science Certificate program and the first SUS BOR approved Master of Science in Forensic Science, an interdisciplinary graduate program with non-traditional course delivery available.

Research and training areas available include arson/explosive residue analysis, detector dogs, driving impairment, environmental forensics, forensic DNA analysis/interpretation, forensic facial approximation, forensic toxicology, trace elemental analysis of forensic samples, courtroom persuasion, eyewitness indentifications and recall, eyewitness testimony of children, jury selection and decision making, patterns in narcotics trafficking and substance abuse. Students working with the institute have access to state-of-the-art facilities and instrumentation including HPLC/MS, ICP/MS, pyrolysis GC/MS, SPME/GC/MS/MS, GRIM II, SFEs, CZE, environmental SEM, etc. For additional information, please write to IFRI, Department of Chemistry, FIU, University Park, Miami, Florida 33199, (305)-348-6211 or visit our web site at www.fiu.edu/~ifri

International Hurricane Center

The International Hurricane Center (IHC) is a Type I research center serving the State University System of Florida. Type I status was approved by the Board of Regents on March 15, 1996, and makes the IHC Florida's official hurricane research center for the ten universities comprising the state system. The IHC is also designated as the formal liaison for NOAA's Tropical Prediction Center (also known as the National Hurricane Center) located on the University Park campus.

The IHC promotes an inter- and multi-disciplinary research mission focused on mitigation of hurricane damage to people, the economy, and the built and natural environments. The IHC's large-scale research agenda includes topics in diverse disciplines such as engineering, architecture, sociology, psychology, anthropology, urban planning, economics. business, finance, insurance, environmental science and public health, among others. Research opportunities for interested graduate level students exist in most of the areas previously cited.

For more information, contact the IHC at (305) 348-1607 or visit our website at http://www.fiu.edu/orgs/IHC

Institute of Judaic Studies

The Institute of Judaic Studies (IJS) brings the University and the community together in a mutual effort to nurture teaching and research in academic areas which stand as the cornerstones of Western Civilization. Contemporary issues and problems provide focal points for study, dialogue, exchange and travel.

The objective of the Institute is to infuse Jewish content into the curriculum of the University at all appropriate levels. The Institute fosters scholarship and inquiry into Jewish themes leading to the development of course offerings within existing academic departments. For more information, call (305) 348-1862.

Center for Labor Research and Studies

The Center for Labor Research and Studies, established in 1971 is the only labor center in Florida and one of the most dynamic in the nation. It serves students, faculty and administrators throughout the State University System as well as labor, business, community organizations, academics, policy makers, and journalists, nationally and internationally, through a series of diverse activities.

Accredited through the University and College Labor Education Association (UCLEA), the Center is one of 51 accredited labor centers in the United States. Its broad mission is to provide services to workers and their organizations. This broad mission translates into three specific objectives: 1) provide comprehensive, statewide labor education service; 2) provide programs designed to support faculty research in labor relations, the changing nature of work, and labor education issues; and 3) offer a multidisciplinary credit and non-credit curriculum in labor studies at the University.

As a Type I Center of the Florida State University System, the CLR&S has major responsibility at the University for research and curriculum development on labor relations and the changing nature of work in Florida. This responsibility can be met, in part, by following the University's mandate as described in its mission statement: [to] serve the broad community, with special concern for greater Miami and South Florida, enhancing the metropolitan area's capacity to meet its cultural, economic, social and urban challenges.

Since it was founded, the CLR&S has become recognized for its innovative national and international non-credit education programs. These programs have educated labor and management participants in areas including labor relations, pension fund administration, dispute resolution, labor history, dynamics of worker

participation and international labor issues.

The Center's non-credit classes for Florida's labor-management practitioners include open enrollment single courses, individualized courses for particular unions, as well as two certificate programs: the Workplace Issues Certificate and the Union Leadership Academy Certificate. The credit program, offered through the College of Arts and Sciences, includes a Bachelor's Degree in Liberal Studies with a concentration in Labor Studies and two related Certificate programs

The Center houses various projects which serve to carry out its research and training functions including non-credit programs and conferences, applied and theoretical research projects, and publications including Latin American Labor News, Labor Studies Forum, the quarterly newsletter, LEARN (Labor Education, Action and Research Network) and an Occasional Paper Series. In addition, two related institutes, the Immigration and Ethnicity Institute and the Human and Labor Rights Institute, are housed at the Center. The Center is located in the Labor Center building at the University Park Campus, (305) 348-2371, Fax: (305) 348-2241.

Latin American and Caribbean Center

The Latin American and Caribbean Center (LACC) promotes advanced education and research on Latin America and the Caribbean, a region of intense interest to the United States. It offers undergraduate and graduate certificate programs to both degree and non-degree seeking students, combines research in the social sciences and the humanities, promotes graduate and undergraduate instruction, and offers publications and public education activities that address the full range of issues affecting hemispheric relations.

LACC also offers a Master of Arts in Latin American and Caribbean Studies. This multidisciplinary master's program builds on FIU's strong and growing resources in area studies, most notably the more than 100 faculty members who are recognized nationally and internationally for their expertise on the region. LACC faculty span many disciplines, including: economics, environmental studies, history, international relations, modern languages, political science, and sociology/anthropology. For more information about the M.A. in Latin American and Caribbean Studies see the College of Arts and Sciences section in the Graduate Catalog.

Since it was founded in 1979, LACC has become one of the country's leading programs in contemporary Latin American and Caribbean studies. Through special seminars, colloquia, and other presentations sponsored by LACC, faculty and students have access to visiting scholars and other professionals with expertise on Latin American and Caribbean issues. Extemally funded research programs support a continual flow of visiting Latin Americanists and Caribbeanists to the University. Through the external grants it receives, LACC contributes to the University's efforts to strengthen its Latin American and Caribbean studies library collection. LACC receives funding from state and federal sources as well as private foundations, among them, the Andrew Mellon, Tinker, Rockefeller, and Ford Foundations.

LACC itself houses several specialized institutes. These include the Cuban Research Institute (CRI), the only academic center in the United States devoted exclusively to the study of Cuba and Cuban-Americans. CRI offers a Cuban and Cuban-American studies certificate program for undergraduates that builds on the strength if instiutional and community resources at FIU and the Greater Miami area. Also at LACC is the Intercultural Dance and Music Institute (INDAMI), which organizes regular seminars and performances by artists and scholars of the arts.

In June 1995, the Florida Legislature created, the Summit of the Americas Center (SOAC) to research, analyze, and monitor the accords of the Summit of the Americas, with special attention given to Florida's role in hemispheric trade and commerce. Located within LACC, SOAC is a cooperative venture among LACC, the University of Florida's Center for Latin American Studies, and the University of Miami's North-South Center.

The State legislature also created the Florida Caribbean Institute (FCI) and the Florida-Mexico Institute (FMI) to improve Florida's cultural, commercial, and educational ties with strategic regions. Both FMI and FCI administer competitive scholarship programs which allow students from Mexico and the Caribbean to attend any institution in the State University System or the Community College System at the in-state rate.

LACC regularly places students in foreign study programs and local internships. More information is available in DM 353 University Park, (305) 348-2894 or by visiting the LACC website at http://lacc.fiu.edu

Lehman Center for Transportation Research (LCTR)

The Lehman Center for Transportation Research (LCTR) at Florida International University was established in 1993 in honor of Congressman Bill Lehman and his tireless efforts to make South Florida a better place for all of us. The center's vision is to become a strong 'state-of-the-art' transportation research and training facility. LCTR is committed to serve and benefit our society by conducting research to improve mobility, hence the quality of life issues, develop partnerships in the transportation industry, and educate a multidisciplinary workforce to plan, manage and implement transportation systems.

Faculty, staff and students at LCTR are involved in research related to the planning design, and operation of transportation systems; public policy; air pollution; and the application of geographic information systems and other advanced technologies such as artificial neural networks and scientific visualization in transportation. Future plans include networking with the public and private industry to collaborate on transportation related research. In addition, applied research will be conducted on, but not limited to intelligent vehicle and highway systems.

Center for Management Development & Executive Education

The Center for Management Development and Executive Education, a part of Florida International University's College of Business Administration, was established in 1979 to bring the College's resources and expertise to both local and international business communities. The Center's overriding goal is to increase the competitiveness of the organizations it serves.

The Center offers Certificate Programs in Human Resource Administration, Training and Human Resource Development, and Managing

Quality Health Care Systems. The Center also manages the Graduate Diploma Series program, which provides a non-credit Certificate to graduates in International Business and International Marketing. The Center offers professional development seminars on topics like leadership and conflict resolution. It also provides contract training and customized, in-house training programs tailored to individual organizations' needs.

In addition, the Center serves as clearinghouse and referral center for matching the College's resources to the particular management and human resources issues facing businesses and other organizations in the community.

The Center for Management Development and Executive Education is located in the Ryder Business Building, University Park Campus (305) 348-4237.

Manufacturing Research Center (MRC)

Based on the principles of concurrent engineering, the Manufacturing Research Center (MRC) is divided into two major labs and built to provide a seamless integration of computerized engineering tools for design (CAD), manufacturing (CAM), inspection (CM), and rapid prototyping (RP) for both mechanical and electronic product design and fabrication. With input from the MRC's Industrial Advisory Board, a broad range of software and hardware systems were carefully selected as offering the best tools to serve the industry. Silicon Graphics workstations are used as the backbone of the system, on which software and hardware systems communicate and share information within the MRC network and are connected to external systems through the internet. The MRC has two main laboratories: the *Rapid Product Realization Laboratory* and the *Process Characterization Laboratory.*

The *Rapid Product Realization Laboratory* consists of a design front end, a rapid prototyping center for both mechanical and electrical components, computer-driven manufacturing and a coordinate measuring machine to verify the components and feedback into the design process. The design center consists of seven SGI workstations and a server, with backup and additional computer support by the College's of Engineering Information Center (EIC), having been designated a Silicon Works Solution Center by SGI. The design center allows design intent modeled in Pro-Engineer and analyzed with finite element analysis packages.

The Rapid Prototyping Center currently consists of a 3-D Systems 250-40 laser stereolithography system, using laser cross-linked polymer for part realization, a Stratasys fused object modeler using polymer extrusion, and a Helisys Laser-Cutting layer object (paper, ceramic tape) cut-and-stack prototype system. Mechanical parts are fabricated with a Fadal VMC-15 Vertical Machining Center, a CNC turning center, a Hurco MK-2 EDM machine and a Handsvedt DS-2 traveling wire EDM. Production capabilities are enhanced by an Arburg 250-75 injection molding machine. A Brown & Sharpe coordinate measurement machine provides dimensioning analysis and geometry verification. It closes the loop from product design to prototyping and part manufacturing, allowing the evaluation and development of expert manufacturing systems. The Electronic Manufacturing Facility consists of an OZO automatic manufacturing robot that allows rapid manufacturing of printed circuit boards and high performance ceramic-based packages. The system also allows direct writing with both UV and optical photoplotters.

The Processes Characterization Laboratory The manufacturing process laboratory is initially focused on injection molding processes, (including metal) with a research thrust developing in the area of rapid injection molding, using mold inserts fabricated by rapid prototyping processes. Additionally, investment casting processes with a focus on rapid prototyping, will be developed. The laboratory includes an Auberg injection molder, programmable process development furnaces (hydrogen, vacuum, inert air) up 1600°C, and a 190-ton press. The materials characterization lab consists of a field emission scanning electron microscope, a standard SEM (both with light element non-dispersive X-ray spectroscopy), a 200 keV transmission electron microscope with sample preparation capabilities (ion mill, dimpler, lapping fixtures), an X-ray diffractometer with 1600°C furnace, termal analysis (DSC, TGA, DMA, thermal expansion), mechanical testing (uniaxial and cyclic loading, creep), and sample preparation and inspection capabilities.

Training: The MRC and EIC regularly schedule training courses in Pro/E, visual C, and other industry-specific software at substantial discounts to our members and with flexible schedules. Course instructors typically come from industry, bringing real-life hands-on experiences to the class.

The MRC and Industry: The nearly 7000 manufacturers in the State of Florida, representing over 40%, reside in the tri-county area served by FIU, with the largest concentration in Miami-Dade county. However, without strong participation in the upgrading of manufacturing practices, many current manufacturers will become obsolete in the changing realities of the global economy of the 21st century. The primary objective of the MRC is to prepare manufacturing engineers for an era where enterprises will be mostly information-based and international in nature. Numerous new and more effective engineering data management tools, product development software, electonic cataloging and electronic commerce are rapidly emerging, speeding up the advent of "manufacturing over the Internet"

Membership: The MRC provides the access for industry to utilize the capabilities and resources of the College of Engineering and its outstanding faculty. The cost of membership is a donation to the FIU Foundation, and therefore tax deductible.

For more information, contact http://wwwl.eng.fiu.edu/MRC Dr. W. Kinzy Jones at (305) 348-2345 or Dr. Chin-Sheng Chen at (305) 348-3753.

Metropolitan Center

The Metropolitan Center is an urban research and technical assistance organization that supports city, county, and state governments, the private sector, not for profits and community organizations in South Florida. The overall goal of the Metropolitan Center is to provide the best possible information for decision-makers, community leaders, and citizens as they forge solutions for metropolitan problems. Toward that goal, the Metropolitan Center strives to bring together faculty, students, experts and other leaders from the community around issues and problems of critical concern to the South Florida metropolitan area. The Metropolitan Center's main services and resources include:

- The FIU Data Center, the only integrated economic development database in the region, specializing in business, employment,

demographic, and other social data.
- Professional Training and Technical Assistance Programs.
- White Papers and Policy Forums on critical regional and urban issues.
- Legislative Research Services providing data and analysis to the Miami-Dade State Legislative Delegation on policy issues.

Created in 1998 as part as FIU's "Quality Improvements" initiative, the Metropolitan Center is an umbrella organization that houses the Insitute of Government, the Joint Center for Environment and Urban Problems, and the Dewey Knight Center for Public Service. By joining the efforts of these organizations, the Metropolitan Center brings to South Florida an extensive background of experience in urban and regional planning, growth management, economic development, natural resource management, community development, public management, and financing

The Metropolitan Center is located in downtown Miami at 150 SE 2nd Avenue, Suite 1201.

For more information call (305) 349-1251 or visit our web site at www.fiu.edu/~metcntr

National Policy and Resource Center on Nutrition and Aging

Vision: reduce malnutrition and food insecurity and promote good nutritional practices among older adults.
Mission: work with the Federal Administration on Aging (AoA) and the USDA to provide national leadership in Aging, Nutrition Extension Networks; place food and nutrition services in the mainstream of home and community based social, health and long-term care delivery systems serving older individuals.

The Center helps Elderly Nutrition Programs, the cornerstone of the Older Americans Act, improve their food and nutrition services, use resources more effectively, and adapt to changes in demographics, health care and public policy. The Center assists the Aging Network that includes more than 2200 local nutrition projects serving congregate and home delivered meals, 57 state and territory agencies on aging, 227+ tribal organizations and 650+ area agencies on aging. The Center provides technical training and conducts policy analysis and best practices research. With the rapidly increasing numbers of frail, homebound older adults, the Center is dedicated to (1) risk-based screening to identify the most nutritionally needy, (2) expansion of food and nutrition services in health, extension and social service programs, and (3) integrating food and nutrition services into interdisciplinary care management to improve quality of life, promote independence, and decrease early nursing home admissions and hospitalizations. A new USDA-sponsored project will strengthen outreach in rural communities to reduce critical service gaps for at-risk elders.

Public/private partnerships enable the Center to work with programs, professionals, older individuals and caregivers to strengthen programmatic and personal commitments to food and nutrition as foundations for good health.

The Center can be reached at (305) 348-1517, fax (305) 438-1518, email: nutreldr@fiu.edu or online http://www.fiu.edu/~nutreldr Nancy S. Wellman, PhD, RD, FADA, Director; Dian O. Weddle, PhD, RD, FADA, Co-Director.

Institute for Public Management and Community Service

The Institute for Public Management and Community Service was re-established by the College of Urban and Public Affairs at Florida International University in 1994. Since then, the Institute has had extensive involvement in governance reform projects in North, Central and South America as well as Africa, Eastern Europe and Asia. These projects have involved the Institute's Director, Assistant Director and other staff in working with many national legislative bodies, several national chief executives and numerous government ministers. Institute projects have focused on issues of executive-legislative relations, legislative development, decentralization, civil service reform, the strengthening of local and other sub-national government and the promotion of citizen participation and governmental and political accountability. Particularly notable in this regard has been the work of the Institute in Paraguay where, through a USAID funded project, Institute personnel worked with national, departmental and local governments and grassroots communities in bringing about major governance reforms at all levels of Paraguayan society. In addition to its extensive technical assistance and consulting activities, the Institute has carried out a wide variety of research and training activities, both within and outside of the United States.

In its work in Paraguay, as well as in Argentina, Chile and Peru, Institute staff have worked very closely with the leadership of the government of Miami-Dade County in carrying out a wide variety of local government technical assistance and democratic development activities. The Institute continues its work with Miami-Dade County through its organization for the County each year of the annual Hemispheric Mayors Conference, which typically brings together 400 municipal leaders from throughout Latin America, the Caribbean and North America. This annual gathering has come to be recognized throughout the Hemisphere as the principal recurring meeting on issues of local governance in Latin America. In addition, the Institute has organized numerous conferences and seminars throughout the Hemisphere. It will also be serving as the secretariat for the 1999 annual conference of the National Association of Schools of Public Affairs and Administration meeting in Miami Beach and the 2000 annual conference of the International Association of Schools and Institutes of Admininstration in Beijing, China.

The Director of the Institute, Dr. Allan Rosenbaum, has worked in local, state and national government in the United States and has consulted extensively both within the United States and in most parts of the world and for the United Nations. He currently serves as Chairperson of the International Committee of the US-based National Association of School of Public Affairs and Administration. He has written extensively on issues of public administration, governance reform, democratization, decentralization and strengthening of local governance. Mrs. Cristina Rodriguez-Acosta, the Institute Deputy Director received her Bachelor's degree from Universidad del Salvador in Argentina and a Masters Degree from Georgetown University in the United States. A native of Argentina, Mrs. Rodriguez-Acosta has had considerable experience in various parts of Latin America and oversaw the Institute's extensive activities in Paraguay

Institute for Public Opinion Research

The Institute for Public Opinion Research (IPOR), is a research arm of the School of Journalism and Mass Communication at Florida International University. IPOR was founded in 1983 to provide decision makers with reliable and timely information on how a scientifically-selected sample of the public stands on important issues, and to enhance the dialogue on major issues among decision makers, the media, and the people of Florida. IPOR provides professional services in all aspects of survey research including study and sample design, questionnaire development, interviewing, data entry, data analysis, and report writing. IPOR is a member of national Network of State Polls (NNSP).

IPOR has just installed a brand new computer lab on the North Campus, with each of our 16 telephone survey stations connected to a network server. Surveys can now be conducted through our computer assisted telephone interviewing (CATI) system. This allows us to program and conduct extremely complex surveys with elaborate skip patterns. It also allows us to instantly track marginals for survey questions, demographic balance in the sample and overall response rates at any time during the survey. Each station has a new computer with the power to run applications such as GIS as part of the interview process. All IPOR project personnel are well-paid professionals who are specially trained for each project and who are monitored for adherence to IPOR's procedures and guidelines. Our pool of interviewers include a number of Spanish/English bilingual speakers.

IPOR has conducted over 65 surveys, interviewing over 60,000 respondents. Survey populations have ranged from community to state-wide. Polls have been conducted for national, state, local, and community governments, scholars at FIU and other universities, and in conjunction with area newspapers. survey types range from highly structed closed-ended interviews to unstructed open ended interviews.

IPOR is now offering services in computer-assisted media content analysis. This analysis allows for extensive review of thousands of stories to determine how the media covers and, therefore, how the public is informed of an issue, institution, or organization. This content analysis can be conducted over time to see if coverage has changed and can offer insight into past public opinion for which survey data must be lacking.

One of IPOR's main project is the annual FIU/Florida Poll, one of the most comprehensive public opinion surveys conducted in the country. The FIU/Florida Poll has been conducted every year since 1988. The poll asks Floridians how they feel about the important issues facing them—crime and drugs, education, transportation, health, taxes, politics, etc., and tracks these questions year after year to determine whether and how views are changing. The results are published in book form and have been cited by the media, the private sector, and government agencies throughout the state.

IPOR studies include five needs assessment surveys of the elderly in Florida or Dade County. Two of these surveys, one of Dade county elderly and the other of Florida's elderly population, are the most comprehensive surveys of their kind ever conducted, with the data providing critical information for planning the care of these groups into the next century. Other health related research conducted by IPOR include three cancer awareness and prevention/behavior surveys.

Major IPOR surveys that are helping inform critical policy and development decisions include: a survey of over 5,000 Dade County residents on the issues of service delivery and incorporation which has provided information critical to incorporation efforts of areas of unincorporated Dade County; two statewide surveys central to planning for the Florida transportation system on Floridians attitudes and behaviors regarding the state transportation system; two surveys on the effects of Hurricane Andrew that are being used to help disaster planning both locally and nationally; and two surveys of the residents of south Florida of their attitudes regarding police protection and crime that are helping guide the public safety planning in the region.

Other surveys include a study to measure awareness, attitudes, and behavior regarding recycling; studies of drug abuse in the workplace, the school age population, and in the general population in Dade County; several studies measuring public attitudes on international issues including the war with Iraq, and U.S. policy toward the government in Cuba; and studies on parks and recreation, homelessness, taxation and spending, and labor issues.

IPOR is constantly working with new technology and data sources to develop and test new sampling and interviewing methodologies. Using new geographic information systems (GIS) technology, IPOR has worked with Dade County planners to provide a sampling strategy for a field study of Dade County elderly living in areas most affected by Hurricane Andrew, and with Federal Emergency Management Agency (FEMA) and Florida's Bureau of Economic and Business Research to collect, manage, and analyze data on the effects of Hurricane Andrew on the population of South Dade.

IPOR is located in ACII, Room 301. For more information call (305) 919-5778; fax (305) 919-5242, or send e-mail to gladwin@servms.fiu.edu or visit our website at http://www.fiu.edu/orgs/ipor

Institute for Public Policy and Citizenship Studies

The Institute for Public Policy and Citizenship Studies was founded in 1985 to offer students, faculty, and the community alternative learning opportunities in public policy and citizenship development. Four key objectives have guided the Institute's programs:

1. To provide non-traditional educational opportunities to the student body on the responsibilities and opportunities of citizenship.

2. To assist students and faculty in understanding the impact that public policy has on their daily lives and in their career pursuits.

3. To promote interdisciplinary research efforts among faculty on local and national policy matters.

4. To encourage joint university and community efforts on local policy issues.

The Institute sponsors the Student Honors Mentor Program, a semester-long opportunity for students to meet and interact with peers and faculty members from other academic disciplines. The Mentor Program encourages participants to examine a public policy issue in a small group setting through discussions, research, or innovative projects. In providing an alternative mode of learning, the Institute hopes to give students

practical experience in community decision-making and problem-solving.

The Institute also sponsors and supports the annual Intergenerational Public Policy Summer Institute which teams elder civic activists with high school students, many of whom are at-risk.

The Institute offers an interdisciplinary and practical approach to the study of public policy with its Certificate Program in Public Policy Studies. See 'Certificate Programs' for further information.

The Institute also works in cooperation with other FIU centers, including the Women's Studies Center, The Center on Aging, The Labor Center, and The Latin American Caribbean Center.

In addition, the Institute sponsors conferences and events focusing on key policy issues that are salient within our local community. Nationally known speakers and University faculty are invited to present their research findings and perspectives on a variety of issues ranging from citizenship education in Dade County to the ethical implications of an aging society to the impact of government regulations on the fishing industry. The conferences are designed to offer the public and university community additional resources in understanding the policy problems that we, as a community, face on a daily basis.

The Institute is located in LC 220, University Park, (305) 348-2977.

Ryder Center for Logistics

The Ryder Center for Logistics, housed in Florida International University's College of Business Admininstration, exists to develop and promote academic, research, and continuing education programs in the field of logistics.

The College offers an undergraduate academic major in logistics supported through the Center that prepares graduates to pursue careers in a variety of fields within the spectrum of logistics—technology, strategy, transportation, globalization, integration and more. Its academic and faculty development activities include the design and construction of a virtual logistics technology demonstration laboratory.

The Center also sponsors and coordinates seminars, conferences, and outreach services for business and professional publics—both within and beyond the South Florida region—on logistics and enterprise resource planning (ERP).

The Center is located in the Ryder Business Building, University Park Campus, (305) 348-2719.

Small Business Development Center

The Small Business Development Center (SBDC) is a program designed to provide comprehensive small business management and technical assistance to the small business community. The Center serves as a focal point for linking resources of the federal, state, and local governments with those resources of the University and the private sector. These resources are utilized to counsel and train small businesses in resolving start-up, organizational, financial, marketing, technical, and other problems they might encounter.

The Small Business Development Center is a basic services center. It disseminates business management information, performs financial analyses and management audits, assists in market and feasibility studies, and provides business management counseling and training.

In June 1980, the SBDC started actively fulfilling its mission to the small business community of the greater Miami area by providing counseling services and training programs to the public. In the past year, the SBDC staff provided 3,419 people from the community with small business management training. Also, the Center counseled 3,537 persons in starting and managing their small businesses during the same period.

The Center also attracts many clients through its special services such as the International Trade Program and the Florida Energy Assistance Program. These services are designed to provide, respectively, counseling and training for exporters/importers and reduction of energy consumption and costs in small businesses. In addition, we provide business assistance to the Hispanic business community through the Hispanic Enterprise Development Program.

The SBDC is actively involved in promoting community relations for the University through the activities of its staff with Chamber of Commerce, trade associations, and community-based organizations. These activities include serving on committees and numerous speaking engagements.

The Center is located in EAS building, Room 2620, (305) 348-2272, HM 112A & B, North Campus, (305) 919-5790, and 46 SW 1st Avenue, Dania, (954) 987-0100.

Southeast Florida Center on Aging

The Southeast Florida Center on Aging offers a multi-disciplinary program in gerontology with a unique public sector focus. It is the mission of the Center to serve as a focal point for applied public policy and practice research; to design and implement comprehensive gerontological education and training programs for students, professionals and older learners; and to demonstrate new and innovative concepts to serve older persons. The Center seeks to achieve its goals through a wide variety of educational activities designed to further the pursuit of knowledge and understanding about aging in today's society, with particular emphasis upon the development, implementation, and evaluation of public policy in Florida, the United States, and throughout Latin America and the Caribbean.

Objectives: The Center supports, sponsors, conducts, and participates in a wide range of activities aimed at improving the quality of life for older people of South Florida. Pursuant to its mandate for education and training, research, and community service, the Center is engaged in:

1. Development of gerontology education across disciplines throughout the University community.
2. Expanded opportunities for training and professional development of persons working with or planning to work with older people.
3. Research with special emphasis on public policy and practice in the areas of long term care, justice systems and new roles and opportunities.
4. A wide range of lifelong learning and educational opportunities for older people.
5. Collaboration with public agencies and community organizations aimed at improving the effectiveness of programs for older people.

The Center consists of three components:

Research: Focus on applied policy and practice research, as well as promotion of research involving faculty from a variety of disciplines within the University. There is an emphasis on potential applications of research

findings by policy makers and health and social services practitioners.

Education and Training: Coordination of credit and non-credit certificate programs for undergraduate and graduate students and for practitioners in the field of aging. The Center delivers training seminars and workshops both at the University and at locations throughout Southeast Florida.

The Elders Institute, a continuing education program, offers a broad array of continuing education courses for the older learner and is exploring development of additional educational and cultural opportunities for older persons.

Program Development and Technical Assistance: Design of innovative concepts and programs that further public policy objectives through expansion of opportunities for older people and improvement of the delivery of health and social services to them. The Center provides assistance and support for agencies and organizations serving older people throughout Florida and with new emphasis in Latin America and the Caribbean.

The Center is located in ACI 384, North Campus, (305) 919-5550.

Southern Technology Application Center STAC

The Southern Technology Application Center (STAC) serves nine southeastern states and is part of a national network of technology transfer resources and expertise. STAC's mission is to help increase U.S. competitiveness and spur economic development in the southeast through the transfer of critical knowledge. One of the programs STAC operates in the Southeast Regional Technology Transfer Center to help companies acquire and commercialize technology developed by NASA and other federal laboratories. It provides assistance in every phase of technology develop-ment and commercialization. STAC's assistance spans from identifying and locating technologies, to analyzing markets, to bringing together experts from government, academic and industry to address complex technical questions. STAC is supported by the State of Florida University System and NASA's Office of Space Access and Technology, Commercial Technology Division. Marc Rippen is the areas STAC Director and is available to answer any questions as well as provide technical assistance to any interested parties. He can be reached at (305) 348-1751.

Women's Studies Center

The Women's Studies Center, established in 1982, is a university program with a multipurpose mission that focuses on the development and coordination of academic women's studies courses and the support of research on gender. In addition, the center coordinates extracurricular programming on gender issues for faculty, staff, students, and the general community.

The center offers a Bachelor of Arts degree in women's studies, a certificate program, and courses as electives in most disciplines. The courses in women's studies provide an opportunity for the study of the historical, political, economic, literary, social, and cultural roles of women and of the function of gender in diverse societies and cultures. The courses are coordinated through various university departments, and are open to women and men alike, as a balance to traditional education. In Women's Studies classes, students explore the range of women's experiences, from their struggle for equality to their contributions in politics, history, literature, psychology, and other subjects. Through this rich discipline, sexual bias throughout society—in the workplace, in school, and at home—is analyzed through historical study and new theory. Equal importance is given to the commitment to discover and teach ideas and knowledge about global concerns, nationality, race, ethnicity, class, age, and sexual identity. The program is directed toward specialists and generalists alike. Students should refer to the Arts and Sciences women's studies section for degree and certificate details.

The center fosters faculty research in Women's Studies through various means including a publications series; research seminars; lecture series; and conferences, such as an annual Women's History Month Conference. In addition to coordinating academic courses and research in Women's Studies, the program provides a place and opportunity for extracurricular activity. The center offers assistance on issues of inequality and access to information on gender issues and concerns. The resources of the center are used by the academic and general community, and everyone is welcome to visit or inquire about out services.

The center is located in DM 212, University Park, (305) 348-2408.

Florida's Statewide Course Numbering System

Courses in this catalog are identified by prefixes and numbers that were assigned by Florida's Statewide Course Numbering System. This common numbering system is used by all public postsecondary institutions in Florida and by fourteen participating private institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions.

Each participating institution controls the title, credit, and content of its own courses and assigns the first digit of the course number to indicate the level at which students normally take the course. Course prefixes and the last three digits of the course numbers are assigned by members of faculty discipline committees appointed for that purpose by the Florida Department of Education in Tallahassee. Individuals nominated to serve on these committees are selected to maintain a representative balance as to type to institution and discipline field or specialization.

The course prefix and each digit in the course number have meaning in the Statewide Course Numbering System (SCNS). The list of course prefixes and numbers, along with their generic titles, is referred to as the "SCNS taxonomy." Description of the content of courses are referred to as "course equivalency profiles."

General Rule for Course Equivalencies

Equivalent courses at different institutions are identified by the same prefixes and same last three digits of the course number and are guaranteed to be transferable between the participating institutions that offer the course, with a few exceptions. (Exceptions are listed below).

For example, a survey course in social problems is offered by 31 different postsecondary institutions. Each institution uses "SYG-010" to identify its social problems course. The level code is the first digit and represents that year in which students normally take this course at a specific institution. In the SCNS taxonomy, "SYG" means "Sociology, General," the century digit "0" represents "Entry-Level General Sociology," the decade digit "1" represents "Survey Course," and

the unit digit "0" represents "Social Problems."

In science and other areas, a "C" or "L" after the course number is known as a lab indicator. The "C" represents a combined lecture and laboratory course that meets in the same place at the same time. The "L" represents a laboratory course or the laboratory part of a course, having the same prefix and course number without a lab indicator, which meets at a different time or place.

Transfer of any successfully completed course from one participating institution to another is guaranteed in cases where the course to be transferred is offered by the receiving institution and is identified by the same prefix and last three digits at both institutions. For example, SYG 1010 is offered at a community college. The same course is offered at a state university as SYG 2010. A student who has successfully completed SYG 1010 at the community college is guaranteed to receive transfer credit for SYG 2010 at the state university if the student transfers. The student cannot be required to take SYG 2010 again since SYG 1010 is equivalent to SYG 2010. Transfer credit must be awarded for successfully completed equivalent courses and used by the receiving institution to determine satisfaction of requirements by transfer students on the same basis as credit awarded to native students. It is the prerogative of the receiving institution, however, to offer transfer credit for courses successfully completed which have not been designated as equivalent.

Sometimes, as in Chemistry, a sequence of one or more courses must be completed at the same institutions in order for the courses to be transferable to another institution, even if the course prefix and numbers are the same. This information is contained in the individual SCNS course equivalency profiles for each course in the sequence.

The Course Prefix

The course prefix is a three-letter designator for a major division of an academic discipline, subject matter area, or sub-category of knowledge. The prefix is not intended to identify the department in which a course is offered. Rather, the content of a course determines the assigned prefix used to identify the course.

Authority for Acceptance of Equivalent Courses

State Board of Education Rule 6A-10.024(17), Florida Administrative Code, reads:

When a student transfers among institutions that participate in the common course designation and numbering system, the receiving institution shall award credit for courses satisfactorily completed at the previous participating institutions when the courses are judged by the appropriate common course designation and numbering system faculty task forces to be equivalent to courses offered at the receiving institution and are entered in the course numbering system. Credit so awarded can be used by transfer students to satisfy requirements in these institutions on the same basis as native students.

Exceptions to the General Rule for Equivalency

The following courses are exceptions to the general rule for course equivalencies and may not be transferable. Transferability is at the discretion of the receiving institution:

1. Courses in the _990-_999 series
2. Internships, practical, clinical experiences, and study abroad courses
3. Performance or studio, courses in Art, Dance, Theater, and Music
4. Skills courses in Criminal Justice
5. Graduate courses

College preparatory and vocational preparatory courses may not be used to meet degree requirements and are not transferable.

Questions about the Statewide Course Numbering System and appeals regarding course credit transfer decisions should be directed to Lynette Housty in the Registrar's Office at (305) 348-2320, or the Florida Department of Education, Office of Postsecondary Education Coordination, 1101 Florida Education Center, Tallahassee, Florida 32399-0400. Special reports and technical information may be requested by calling telephone number (904) 488-6402 or Suncom 278-6402.

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Head Women's Basketball Coach **Cindy Russo**
Head Cross Country/ Track Coach **Mike Becker**
Head Men's and Women's Golf Coach **TBA**
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Head Women's Soccer Coach **Everton Edwards**
Head Softball Coach **Kim Gwydir**
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School of Architecture

School of Architecture

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Marta Canaves, *Visiting Assistant Professor*
Rene Gonzalez, *Assistant Professor*
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Nicolas Quintana, *Visiting Assistant Professor*
Camilo Rosales, *Associate Professor, Director Architecture*
John Stuart, *Associate Professor*
Mario Valbuena, *Visiting Assistant Professor*

The School of Architecture is dedicated to advancing the professions of architecture, landscape architecture, and interior design. In keeping with the nature of these professions, the programs are taught in an interdisciplinary manner, taking full advantage of the resources and areas of expertise offered by each. The school offers two undergraduate degree programs, a Bachelor of Design in Architectural Studies and a Bachelor of Science in Interior Design, and two graduate degree programs, a Master of Architecture, and a Master of Landscape Architecture. (See Graduate Catalog for descriptions).

Community Involvement

The School maintains close ties with the architecture, landscape architecture, and interior design professionals and professional advisory committees periodically review the curriculum to maintain program relevance.

Admission Preparation

Prospective students who are considering majors within the School of Architecture must meet the University's general admission requirements. The School's academic programs require specific prerequisite preparation prior to enrollment in certain courses. Students should check individual program requirements and be advised by the School well in advance of anticipated entry or transfer into a given program.

Bachelor of Design in Architectural Studies

Degree Program Hours: 128

This preprofessional program provides the student with a broad base of multidisciplinary knowledge related to the field of architecture. Graduates are prepared for entry into a professional Master of Architecture or a Master of Landscape Architecture degree program. Students should confirm individual program requirements and be properly advised. Emphasis is on the balance between the technical, managerial, theoretical and design aspects of architecture. Additionally, computers are treated not as a specialty but rather as a tool to be integrated into the various areas of study. Many of the courses are taught in an interdisciplinary environment thus sharing the expertise of architecture, interior design.

Lower Division Preparation

Students should enroll in lower division design courses the first semester they attend FIU or their progress through the curriculum will be delayed.

To qualify for admission to the program, normally FIU undergraduates must have met all the lower division requirements including CLAST. In addition, FIU undergraduates with less than 36 semester hours, must meet all the University Lower Division Core Requirements.

Lower Division Common Core (37)

ARC 1131	Graphic Communication 1	3
ARC 1301	Design 1	4
ARC 1461	Methods & Materials of Construction 1	3
ARC 1132	Graphic Communication 2	3
ARC 1302	Architectural Design 2	4
ARC 2303	Architectural Design 3	4
ARC 2304	Architectural Design 4	4
BCN 2402C	Structures	3
IND 2430	Lighting Design	3
ARC 2701	History of Architecture 1(H)	3
ARC 2702	History of Architecture 2	3

(H) May fulfill humanities requirements. Check with Departmental Advisor.

Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog's General Information for Admission and Registration and Records.

Upper Division Transfer Applicants

Completion of an Associate's degree in Pre-Architecture or a related field or completion of at least 60 semester hours and submission of a portfolio, is required of all upper division transfer applicants. All applicants will have their credentials reviewed by the Faculty Admissions Review Board prior to full admission into the program. Conditional admission can be granted pending review of credentials. Applicants should consult the department for specific information.

Only 'C' grades or higher are accepted for transfer of applicable prerequisite and core courses from other institutions. No grade below a 'C' will be accepted for graduation in prerequisite or core courses.

Student work submitted to the School in satisfaction of course or degree requirements, becomes the physical property of the School. However, students retain all rights to the intellectual property of such work. This work may include papers, drawings, models, and other materials. The School assumes no responsibility for safeguarding such materials. At its discretion, the School may retain, return, or discard such materials. The School will not normally discard the materials of current students without giving them a chance to reclaim them.

Students must petition the faculty of the School in writing for any deviation from the established policies. The faculty will decide on the cases on an individual basis.

Graduation Requirements

To graduate, students must complete all Core and General Education requirements for undergraduates as established by the university.

All upper division students must complete a minimum of 68 semester hours to graduate, which include the

following Core requirements or their equivalent:

Upper Division Program (44 minimum)

Major Requirements

ARC 3243	Design Theories	3
ARC 3463	Methods and Materials of Construction II	3
ARC 4058	Computers Applications in Architecture	3
ARC 4270	Professional Office Practice	3
ARC 4324	Architectural Design 5	4
ARC 4335	Architectural Design 6	4
ARC 4342	Architectural Design 7	4
ARC 4343	Architectural Design 8	4
ARC 4553	Structural Design	4
ARC 4783	History of Architecture 3	3
ARC 4910	Reseach Methods	3
ARC/LAA	History of Theory Elective	3
BCN 4561	Environmental Controls	3

Upper Division Electives (9)
Selected with an advisor to meet degree requirements and program objectives

Bachelor of Science in Interior Design

Degree Program Hours: 120

The Interior Design program is designed to enable graduates to work with other professionals such as architects and engineers in the design of commercial and institutional projects. The program incorporates the recommendations and standards of national and local professional societies and prepares students for work in a design firm or for self-employment at the professional level.

The interdisciplinary program allows students to integrate the technical, managerial, theoretical and design aspects of Interior Design.

The program has developed a strong relationship with the trade and practicing professionals, as exemplified by the Designers Lecture Series and the annual Festival of the Trees.

Lower Division Preparation

To qualify for admission, FIU undergraduates must have met all lower division university requirements including CLAST and must otherwise be acceptable for the program. In addition, FIU undergraduates with less than 36 semester hours must meet all of the University Lower Division Core Requirements.

Lower Division Common Core (40)

ARC 1131	Graphic Communication I	3
ARC 1301	Design 1	4
ARC 1461	Methods & Materials of Construction I	3
ARC 1132	Graphic Communication II	3
ARC 3243	Introduction to Design Theories (H)	3
ARC 1302	Design 2	4
ARC 2701	History of Architecture 1 (H)	3
ARC 2303	Architectural Design 3	4
CGS 2060	Introduction to Microcomputers (M)	3
IND 2230	Interior Design 4	4
IND 2100	History of Interiors 1	3
IND 2130	History of Interiors 2 or equivalent	3

(H) Fulfills humanities requirement (check with advisor)
(M) Meets math requirement

Upper Division Transfer Applicants

Completion of an Associate's degree in Interior Design or related field or completion of at least 60 semester hours. Conditional admission can be granted pending review of credentials. Applicants should consult the department for specific information.

Graduation Requirements

To graduate, students must complete all Core and General Education requirements for undergraduates as established by the university.

Upper Division Program: (47)

Major requirements: (44)

IND 2210	Interior Design 5	4
IND 2220	Interior Design 6	4
IND 2221	Interior Design 7	4
IND 4441	Fumiture Design	3
IND 4905	Interior Design 8	3
IND 4943	Interior Design Research	1
IND 4311	Media & Methods of Presentation	3
IND 4501	Interior Design Practice	3
IND 2423	Sources, Materials & Cost Estimating for Interiors	3
IND 3455	Interior Design Construction Drawing 1	3
IND 3451	Interior Design Construction Drawing 2	4
IND 2430	Lighting Design	3
BCN 4561C	Environmental Controls 1	3
ARC 4058	Advanced Computers in Architecture	3

Course Descriptions

Definition of Prefixes

ARC-Architecture; IND-Interior Design; LAA-Landscape Architecture F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

ARC 1001 Introduction to Design (3). A practical introduction to the professional, technical, and aesthetic aspects of architecture, interior design, landscape architecture, and environmental and urban systems.

ARC 1131 Graphic Communication I (3). An introduction to basic drawing principles and techniques: freehand drawing, orthographic and isometric projections and perspectives. Corequisite: ARC 1301. (F)

ARC 1132 Graphic Communication II (3). The second course in graphic communication. Students will develop presentation skills and broaden their visual experience. Presentations will incorporate two and three-dimensional design elements. Prerequisite: ARC 1131, ARC 2302 (Corequisite). (S)

ARC 1190 Portfolio Design I (3). An introduction to creating, binding and reproducing graphic materials for presentation.

ARC 1191 Portfolio Design 2 (3). The second course in Portfolio Design. Students will develop their own portfolios using a variety of techniques. Prerequisite: Portfolio Design 1.

ARC 1301 Design I (4). An introduction to concepts, fundamental design elements, and systems of order that inform two and three-dimensional design. Corequisite: ARC 1131. (F)

ARC 1461 Methods and Materials of Construction I (3). The first course in methods and materials. Physical and chemical properties of materials, manufacture, size and shape, and performance under normal loads in a variety of light construction assemblies. (F)

ARC 1930 Special Topics/Architectural Design I (4). An introduction to the basic perceptual, social, cultural,

environmental and technical issues of architectural design. Basic architectural design projects. (F)

ARC 2210 Design Concepts (3). Introduction to principles of design and perception, study of user's need for relationship with environmental and human factors. Examination of design ideas and their development. (S)

ARC 2302 Architectural Design 2 (4). A continuation of Design 1 (ARC 1301). An introduction to principles of proportion and scale with an emphasis on the relationship between the body and three dimensional space. The design process is emphasized. Prerequisite: ARC 1301; Corequisite: ARC 1132. (S)

ARC 2303 Architectural Design 3 (4). Site, social, cultural, and environmental issues are the generator for design projects with repetitive spatial and programmatic elements. The design process is emphasized. Prerequisites: ARC 1302 and ARC 2701. (F)

ARC 2304 Architectural Design 4 (4). A continuation of Design 3 (ARC 2303). The relationship between ideas and structural systems, materials and details are explored in small scale architectural projects. The design process is emphasized. Prerequisites: ARC 2303, ARC 1461 and ARC 2701. (S)

ARC 2701 History of Architecture I (3). Comprehensive study of architectural forms, styles and construction techniques from prehistory to the thirteenth century, including western and non-western traditions. (F,S)

ARC 2702 History of Architecture II (3). Comprehensive study of architectural forms, styles and construction techniques from the tirteenth to the eighteenth centuries, including western and non-western traditions. Prerequisite: ARC 2701.

ARC 2931 Architectural Design 2 (4). Proportioning systems for architecture students stressing the understanding of human proportions in a 3D Space Research on modulating techniques and integration of interior and exterior spaces. Prerequisite: ARC 1930.

ARC 3057 Computer Graphics in Design (3). An intensive hands-on introduction to software for processing text and graphics, as it relates to the field of graphic design. Various computer applications in design. Prerequisite: CGS 2060.

ARC 3133 Graphic Communication (3). To develop the understanding and graphic skills necessary for the conception and communication of design and engineering technology. The course is flexible in order to accommodate different student backgrounds. Basic graphic methods and media, including orthographic and isometric projection; one and two-point perspective; composition, lettering, and presentation techniques.

ARC 3243 Introduction to Design Theories (3). Introduction to the environmental parameters, morphological concepts and ideological principles that generate form and meaning in architecture and landscape architecture. (F)

ARC 3463 Materials and Methods of Construction (3). A study of the types of construction and materials used in building interiors. How materials are properly installed and inspected, including the use of special equipment, in accordance to drawings, specifications, codes, standards, and agencies' recommendations.

ARC 4058 Computer Applications in Architecture (3). Advanced study of computer software packages applicable to the architecture office environment, with particular emphasis on CAD software, graphics packages and Desktop Publishing. Prerequisite: CGS 2060 or equivalent. (F,S,SS)

ARC 4270C Professional Office Practice (3). Assignments in office administration, negotiation of contracts, fee structure, professional ethics, client and public relations. Business organization, procedure scheduling and task allocation within an architectural office. Prerequisite: Senior standing. (F)

ARC 4324 Architectural Design 5 (4). Integration of structure and construction techniques in the production of a small to mid-sized public project that incorporates site considerations, materials and structure. Prerequisites: ARC 2304 and BCN 2402C. (F)

ARC 4335 Architectural Design 6 (4). This studio focuses on housing and related components including the repetitive spatial and structural elements, circulation and contextual considerations. Prerequisites: ARC 4324. (S)

ARC 4342 Architectural Design 7 (4). A flexible framework for appropriate investigations of complex spatial, programmatic, contextual, constructional and ethical issues involved in design projects. Course content varies with instructor. Prerequisites: ARC 4335. (F)

ARC 4343 Architectural Design 8 (4). Architectural design explorations of site, building codes, community objectives will be undertaken through individual programming, process and design initiatives for a complex building project. Pre-requisite: ARC 4342. (S)

ARC 4553 Structural Design (4). Elements of structural design in steel, reinforced concrete, and timber, with design specifications per AISC, ACI and NDS. Introduction to prestressed concrete design. Loadings and structural elements commonly encountered in construction will be used for analysis and design. Prerequisite: BCN 2402C or equivalent. (S)

ARC 4696 Basic Utilities and Housing (3). The study of the importance of basic utilities (such as roads, sewer and water supply systems) in housing planning and construction. A relative cost analysis. Health problems and sociological effects of lack of basic utilities. Innovative concepts to incorporate basic utilities to all housing projects in developing countries. Prerequisite: Permission of the instructor.

ARC 4752 Architectural History of the Americas (3). Historical analysis of the development of built forms and styles in tropical and subtropical Americas. Investigating its socio-political and artistic context. Prerequisite: ARC 2701.

ARC 4754 Asian and African Architecture (3). Comprehensive study of architectural forms, styles, and construction techniques in Asia and Africa. Prerequisite: ARC 2701, ARC 2702, ARC 4783.

ARC 4783 History of Architecture 3 (3). A study of the development of architectural forms, styles and theories of the 19th and 20th centuries in relation to the socio-political and artistic evolution of the designed environment. Prerequisite: ARC 2701. (F,S)

ARC 4799 The Architecture and Landscape Architecture of South Florida (3). Overview of the natural resources, cultural traditions and architectural precedents which have fomented the regionalist architecture and landscape architecture of South Florida. Prerequisite: Departmental approval. (S,SS)

ARC 4xxx Film and the Architecture of Modern Life (3). Critical overview of social and spatial implications of film on architecture and design over the course of the 20th century. Prerequisite: ARC 4783.

ARC 4xxx Gender and Architecture (3). A theoretical, visual and professional exploration of women's and men's roles, identities, and histories in public and private built environments.

ARC 4905 Independent Study (1-5). Specialized individual studies under supervision of faculty advisor. Consent of faculty advisor required. Prerequisite: Departmental approval. (F,S,SS)

ARC 4910 Research Methods (3). Survey of architectural research methods that use primary and secondary sources and materials to study historical and contemporary issues involved in the built environment. Prerequisite: ARC 2304.

ARC 5176C Computer Practices in Design II (3). Advanced study in concepts, issues and methods in computer-aided architectural design. Prerequisite: ARC 4058 or equivalent.

ARC 5361C Graduate Design 1 (6). Exploration of highly articulated projects of small scale utilizing innovative research methods to strengthen and clarify design concepts taken to a detailed resolution. Prerequisite: Graduate standing.

ARC 5362 Graduate Design 2 (6). This course explores architectural projects of medium to large scale applying innovative building technologies to a highly resolved spatial organization. Prerequisite: Graduate standing.

ARC 5750 Architectural History of the Americas (3). Historical analysis of the development of built forms and styles in tropical and subtropical Americas, investigating its socio-political and artistic context. Prerequisite: Permission of the instructor.

ARC 5916 Innovations in Building Technology (3). Experimental approach to new materials and methods applicable to the field of construction. Prerequisite: Senior standing.

ARC 5933 Special Topics in Architecture (1-3). Course to address current special topics of interest developed in cooperation with private or public sector, building industry or professional associations. Prerequisite: Permission of the academic advisor. (DASH)

IND 1932 Special Topics/Interior Design I (4). An introduction to the basic perceptual, social, cultural, environmental and technical issues of interior design. Basic interior design projects. (DASH)

IND 2100 History of Interiors I (3). An analysis of the history of architectural interiors, furniture and decorative arts from ancient times through the Neo-Classical Period. Recommended prerequisite: ARC 2701. (F)

IND 2130 History of Interiors II (3). An analysis of the history of architectural interiors, furniture and decorative arts from the Neo-Classical Period to the present. Prerequisite: IND 2100. (SS)

IND 2210 Interior Design 5 (4). Consideration and application of design criteria with an emphasis on planning and design of interiors for small offices, businesses and other work environments. Students develop programs, work on space planning, as well as furniture selection, illumination and selected architectural details. Prerequisites: IND 2230 and IND 3451. (F)

IND 2220 Interior Design 6 (4). Analysis, programming and design of commercial facilities including stores, restaurants and galleries. Students research the functions, and requirements of the project, design the interior spaces, develop architectural details and work on the selection of furniture and finishes. Prerequisites: IND 2210 and IND 3451. (S)

IND 2221 Interior Design 7 (4). Analysis of the human condition in design. Topics include the behavioral and environmental sciences, ergonomics, and ecology and their impact on design. Prerequisite: IND 2220.(F)

IND 2230 Interior Design 4 (4). Fundamental problems of interior design, spatial organizations, and human factors integrated with research and readings. Design of residential environments and articulation of spaces. Prerequisite: ARC 2303, IND 4311 and IND 3455.

IND 2423 Sources, Materials, and Cost Estimating for Interiors (3). Sources and materials used by interior designers in the development of a design project. Materials available in the market for furniture finishes and equipment and its costs are analyzed. Prerequisite: IND 2210.

IND 2430 Lighting Design (3). A fundamental course in lighting with emphasis on interaction with the design of an interior space. Prerequisites: BCN 4561C and IND 2210. (F,S)

IND 3451 Interior Design Construction Drawing 2 (3). Development of Interior Design working drawings with emphasis on details and schedules using computer technology. Prerequisite: IND 3455 and ARC 4058. (F)

IND 3455 Interior Design Construction Drawing 1 (3). Development of Interior Design working drawings with emphasis on detailing and cabinetry. Prerequisite: ARC 2132.

IND 4311 Media and Methods of Presentations (3). Applications of media and materials used in presentation of design concepts and programs to clients, groups, and organizations. Emphasis on various equipment and graphic techniques available, their application and use in simple and detailed communications. Corequisite: IND 2210. (F)

IND 4441C Furniture Design (3). Introduction to the human factors, concepts, function, materials and techniques of furniture design. Prerequisite: IND 2230.(S)

IND 4501 Interior Design Practice (3). The student will be introduced to the specific skills necessary to succeed in the preparation of of legal documents and specifications. Prerequisites: IND 2210. (S)

IND 4905 Interior Design 8 (3). The final studio involves projects of increased scale and complexity. The studio emphasizes the diversity of aspects that integrate the design process from conceptual formulations and programming to the full development of the design thesis. Prerequisite: IND 4943 and the

completion of all Interior Design Studios.

IND 4943 Interior Design Research (1). Research required prior to registering Interior Design 8. Prerequisite: IND 2220 and IND 2221.

LAA 1933 Landscape Design 1 (4). An introduction to the basic perceptual, social, cultural, environmental and technical issues of landscape architecture design. Basic landscape architecture design projects.

LAA 2934 Landscape Design 2 (4). An introduction to proportioning systems for landscape architecture students stressing the understanding of human proportions related to several scales of the natural and man-made environments. Prerequisite: LAA 1933.

LAA 3350 Landscape Design I (4). Application of Basic Design principles to the design of landscape and garden. A general survey of design elements, restraints, plant materials, and other garden materials will aid the student to develop projects in a laboratory environment. Prerequisite: ARC 3133 (S)

LAA 3712 History of Landscape (3). A survey of landscape history throughout the ages. From the gardens of Mesopotamia, Roman and Islamic periods, the Monastery and Castle gardens of middle ages and the Renaissance, to the influence of Oriental gardens and the modern era. Prerequisite: Permission of the instructor.

LAA 5233 Theory of Planting Design (3). Study of principles and methods related to the ecological, functional, and aesthetic use of vegetation in landscape architectuee. Prerequisite: Program approval. (SS)

LAA 5235 Theory of Landscape Architecture (3). Critical review of the environmental parameters, morphological concepts and ideological principles that generate form and meaning in landscape architecture. Prerequisite: Program approval. (S)

LAA 5243 Regional Landscape Issues (3). Exploration of the landscape as cultural construct of social, economic, and scientific values relevant to regional issues of land use and management. Prerequisite: Program approval.

LAA 5335 Landscape Development (3). Technical aspects of the design of earthwork; and of the specification of materials, products, and methods of installation used in landscape development. Prerequisite: LAA 5653. (F)

LAA 5371 Computer Practices in Landscape Architecture (3). Computer applications of graphics, modeling, and animation techniques used in landscape architecture. Prerequisites: LAA 5653. (SS)

LAA 5424 Landscape Construction (3). Technical aspects of the design of sitework and of the specification of materials, products, and methods of installation used in landscape construction. Prerequisite: LAA 5335. (S)

LAA 5425 Landscape Construction Documentation (3). Production of landscape construction documents, including drawings and project manual with bidding documents, contract documents and technical specifications on the computer. Prerequisite: LAA 5371 and LAA 5424. (F)

LAA 5521 Tropical Landscapes (3). Study of the structure, function, and change in the natural and cultural landscapes of tropical and subtropical regions. Prerequisite: Program approval. (F)

LAA 5540 Landscape Horticulture (3). Overview of horticultural management practices related to the growth, transport, installation, and maintenance of vegetative materials used in landscape architecture. Prerequisite: Program approval.

LAA 5652 Formative Studio (6). Introduction to concept development, spatial expression, and representational techniques in landscape architecture. Prerequisite: Program approval. (F)

LAA 5653 Site Studio (6). Application of landscape architecture principles and methods to site design in tropical and subtropical contexts. Prerequisite: LAA 5652. (S)

LAA 5715 History and Theory of Architecture (3). Overview of the history and theory of architecture and urban design from antiquity to the present. Prerequisite: Program approval. (SS)

LAA 5716 History of Landscape Architecture (3). Historical survey of the principal sites and traditions manifested in the evolution of landscape architecture and urban design from antiquity to the present. Prerequisite: Program approval. (F)

URP 5316 Environmental and Urban Systems (3). Overview of basic issues and principles of environmental and urban planning/design systems. Emphasis will be placed on multidisciplinary linkages.

URP 5912 Research Methods (3). Methods of information search, data interpretaion, and hypotheses formulation used in the field.

School of Architecture

Faculty

Baker, Ted, MLA, MDes, FASLA *(Harvard University), Associate Professor, Landscape Architecture*

Belcher, Nathaniel, M.S., P.E., *(Harvard University), Assistant Professor*

Brug-Chmielenska, Manita, Dip.LA *(University of Edinburgh), Visiting Assistant Professor, Landscape Architecture*

Bueno, J.A., MLA, ASLA, PE *(Harvard University), Associate Professor, Director, Landscape Architecture*

Busch, Claudia, M.S. *(Columbia University), Assistant Professor, Architecture*

Canaves, Jaime, M.A., R.A. *(University of Florida), Associate Professor, Architecture and Associate Dean*

Gonzalez, Rene, M. Arch. *(University of California-Los Angles), Assistant Professor, Architecture*

Lopez-Mata, Gisela, M.S. *(Pratt Institute), Associate Professor, Director, Interior Design*

Majzub, Iraj E., D Arch., R.A. *(University of Torino), Professor, Architecture*

McMinn, William G., M.A. *(University of Texas), Dean and Professor, Architecture*

Rosales, Camilo, M.Arch., R.A. *(Harvard University), Associate Professor, Director, Architecture*

Stuart, John A., M. Arch. *(Columbia University), Associate Professor*

College of Arts and Sciences

College of Arts and Sciences

The College of Arts and Sciences mission is to teach, engage in research and creative artistic activity, and serve the community. This mission derives from the College's traditional focus on the fundamental intellectual disciplines and the premise that a coherent and intellectually rigorous curriculum of the humanities, arts, mathematics, and the social and natural sciences is the foundation for excellence in any undergraduate education. The College provides such a program for students enrolled as freshmen in the Unversity's Core Curriculum and offers General Education and elective courses for transfer students who seek degrees from the University's other Colleges and Schools. Many professional degree programs require courses in specific Arts and Sciences disciplines; these needs are carefully addressed. In addition, the College services the broader community's needs by offering a variety of courses to non-degree seeking students.

The College's mission goes beyond introductory and service courses by exploring the full implications of the Arts and Sciences disciplines in historical and contemporary society. High quality undergraduate degree programs educate students in the fundamentals of each discipline. Graduate programs provide in-depth training for the best students and allow faculty members the opportunity to teach at the frontiers of their fields. Rigorous academic research, scholarship, and creative activity are integral components of faculty activities in all disciplines and are the heart of graduate education.

Characteristically, the liberal arts endeavor to synthesize. Thus, in addition to traditional degree programs, the College coordinates special areas and interests through a number of certificate and interdisciplinary degree programs.

The college is composed of 19 departments, the School of Computer Science, the School of Music, and serveral interdisciplinary programs.

Undergraduate Programs

The College offers departmental programs of study leading to Bachelor's degrees in biological sciences, chemistry, computer science, dance, economics, English, environmental studies, geology, history, international relations, mathematical sciences, mathematics, modern languages (French, Portuguese, and Spanish), music, music education, philosophy, physics, political science, psychology, religious studies, sociology and anthropology, statistics, theatre, and visual arts. The College also offers interdisciplinary programs of study leading to Bachelor's degrees in humanities, liberal studies and women's studies. A labor studies concentration is available in the liberal studies program.

Minor programs of study are offered in art history, biology, chemistry, computer science, dance, economics, English, environmental studies, French language and culture, general translation studies, geography, geology, history, humanities, international relations, mathematical sciences, mathematics, music, philosophy, physics, political science, Portuguese, psychology, religious studies, sociology and anthropology, Spanish language and culture, statistics, theatre, and visual arts.

Certificate Programs

Students can earn through the College certificates in the following: Actuarial Studies, African-New World Studies, American Studies, Brazil Studies, Comparative Immunology, Consumer Affairs, Cuban and Cuban-American Studies, Environmental Studies, Ethnic Studies, European Studies, Forensic Science, Gerontological Studies, International Studies, Judaic Studies, Labor Studies, Labor Studies and Labor Relations, Latin American and Caribbean Studies, Law, Ethics and Society, Legal Translation and Court Interpreting, Linguistic Studies, MERCOSUR Studies, Professional Language, Public Policy Studies, Translation Studies, Tropical Commercial Botany, Western Social and Political Thought, and Women's Studies.

Admission

FIU freshmen and sophomore students may be coded with an "intended" major in the College upon earning 24 semester hours.

They may be fully admitted to the College if they have earned 60 semester hours, have a cumulative grade point average (GPA) of 2.0 and have passed the CLAST. Full admission to the College is accomplished by filing the form "Request for Acceptance into Upper Division College/School."

A transfer student with an Associate in Arts degree from a Florida community college, or having completed the equivalent coursework at a four year institution with a minimum of 60 semester hours earned, having a cumulative grade point average (GPA) of 2.0 and having passed the CLAST, may be admitted to a program in the College. Applicants must submit an Application for Admission to the University and must follow the regular University procedures. Applicants must be eligible for admission to the University before admission to the College.

All students are encouraged to seek advising as early as possible in the department/program of their choice, even if they have not yet been fully admitted into that major.

College Requirements for a Baccalaureate Degree

Candidates to the Bachelor's degree must satisfy individual departmental requirements, and the following College requirements, in addition to the University-wide requirements:

1. A minimum of 120 semester hours in acceptable coursework is required.
2. At least half of the upper division credits in any major must have been taken in residence at the University.
3. In the last 60 semester hours of enrollment, the student must earn nine semester hours of elective credits through coursework outside the major; six of which are to be taken outside the department sponsoring the program.
4. Earn a grade of "C" or higher in all courses required for the major. A grade of "C-" or lower is not acceptable in any required course.
5. Of the total number of hours submitted for graduation, a minimum of 48 semester hours must be in upper division courses.
6. Competency in a foreign language equivalent to the second semester of a college-level language sequence. Students may fulfill this requirement either by taking the appropriate college-level course(s) or by presenting acceptable scores in the Advanced Placement Exam, the SAT II, the CLEP exam, or other approved instruments. Students should consult their advisors for more specific information.

7. One and two-credit physical activity courses (with the prefixes PEL, PEM, PEN) cannot be included as part of the hours needed for graduation.

College Requirements for a Minor

Students who desire to earn a minor must satisfy individual departmental/program requirements, and the following College requirements:

1. At least half of the courses used to fulfill the requirements must have been taken at the University.

2. Earn a grade of "C" or higher in all courses required for the minor. A grade of "C-" or lower is not acceptable in any required course.

3. Of the courses used to fulfill the requirements, at least half of them must be at the upper division level and preferably should include a minimum of one course at the 4000 level.

Note: The programs, policies, requirements, and regulations listed in this catalog are continually subject to review in order to serve the needs of the University's various publics and to respond to the mandates of the Florida Board of Regents and the Florida Legislature. Changes may be made without advance notice. Please refer to the General Information section for the University's policies, requirements, and regulations.

Biological Sciences

Kelsey Downum, *Professor and Chairperson*
James Allen, *Assistant Professor*
Victor Apanius, *Assistant Professor*
Brad Bennett, *Associate Professor*
Charles Bigger, *Associate Professor*
Richard Campbell, *Research Scientist*
Chun-fan Chen, *Associate Professor*
Dan Childers, *Assistant Professor*
Tim Collins, *Assistant Professor*
Keith Condon, *Assistant Professor*
Leon A. Cuervo, *Professor*
Maureen Donnelly, *Associate Professor*
James Fourqurean, *Associate Professor*
Javier Francisco-Ortega, *Assistant Professor*
Robert M. George, *Lecturer*
Walter M. Goldberg, *Professor*
Jack B. Fisher, *Research Scientist*
Rene J. Herrera, *Associate Professor*
Ronald D. Jones, *Professor*
Christopher Kernan, *Research Scientist*
Suzanne Koptur, *Professor*
Julia Kornegay, *Research Scientist*
David N. Kuhn, *Associate Professor, Graduate Program Director, and Associate Chairperson*
David W. Lee, *Professor*
John Makemson, *Professor*
Gerald L. Murison, *Professor*
Steven F. Oberbauer, *Associate Professor*
Case K. Okubo, *Associate Professor and Undergraduate Program Director*
Thomas R. Pitzer, *Instructor and Teaching Assistant Coordinator*
Thomas E. Pliske, *Lecturer*
Jennifer Richards, *Professor*
Laurie L. Richardson, *Associate Professor*
Barbra A. Roller, *Lecturer*
Philip Stoddard, *Associate Professor*
Martin L. Tracey, *Professor*
Joel Trexler, *Associate Professor*
Ophelia I. Weeks, *Associate Professor*
Scott Zona, *Research Scientist*

Bachelor of Science

Degree Program Hours: 120

Common Prerequisites

A grade of "C" or better required.

BSC 1010	General Biology I
BSC 1010L	General Biology I Lab
BSC 1011	General Biology II
BSC 1011L	General Biology II Lab
CHM 1045	General Chem I
CHM 1045L	General Chem I Lab
CHM 1046	General Chem II
CHM 1046L	General Chem II Lab

CHM 2210	Organic Chem I
CHM 2210L	Organic Chem I Lab
CHM 2211	Organic Chem II
CHM 2211L	Organic Chem II Lab
	OR
PHY 2048	Physics with Calculus I
PHY 2048L	General Physics Lab I
PHY 2049	Physics with Calculus II
PHY 2049L	General Physics Lab II
	OR
PHY 2053	Physics without Calculus I
PHY 2048L	General Physics Lab I
PHY 2054	Physics without Calculus II
PHY 2049L	General Physics Lab II

MAC 2311	Calculus I

MAC 2312	Calculus II
	OR
STA 2122	Intro to Statistics I

Courses Required For The Degree

Lower Division Program

Calculus II or Statistics I and II. Calculus I and Statistics I together do not satisfy this requirement.

Two semesters of Physics with lab and two semesters of Organic Chemistry with lab. (Note: courses taken to meet the Common Prerequisites requirements listed above will count toward this requirement; the student must take the additional lower division courses needed to complete the requirement).

To qualify for admission to the department, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable to the department.

Upper Division Program

Required Courses

1. PCB 3043	Ecology	3
2. PCB 3513	Genetics	3
3. BCH 3033	General Biochem	3
4. PCB 4673	Evolution	3
5. BSC 4931	Undergraduate Seminar	1
6. Distribution Requirement		12

One additional lecture course in each of the following areas:

A. Ecology
B. Organismal Diversity
C. Physiology/Biochem
D. Structure/Development

(If a course satisfies this distribution requirement, the letter of the area that it satisfies is in brackets after the course description).

7 Biology Electives[1] 2 lecture courses 6
8. Laboratory Requirement[2] 4 Labs
9. Electives outside major 9
10. A minimum of 48 credits must be earned in Upper Division courses.

[1]Two upper division lecture courses (3000-level and above) to be chosen in consultation with a faculty advisor. The following courses are not allowed as Biology Electives: Student Research Labs (BSC 3915, 4919, and 6916); Cooperative Education credits (BSC 3949 and 4949); Biology of Aging (PCB 3241); and courses for non-science majors (BOT 1010, PCB 2700 and APB 2170, BSC 2023, EVR 3013, and OCB 2003).

[2]Laboratory requirement is met with any four upper division Biology labs offered with the required courses; courses that meet the distribution or Biology elective requirements.

Students interested in teacher certification should contact the College of Education at 348-2768.

Special Programs

Bachelor of Science with Honors

Admission to the Program

a. Permission of the department. Application should be made by letter to the Curriculum Committee from the applicant after completion of two semesters at the University and prior to two semesters before graduation. The letter should state the intended research problem and be countersigned by the Thesis Committee (advisor and mentor).

b. A minimum GPA of 3.5 in biology, chemistry, physics, geology, and mathematics courses.

Graduation Requirements

a. A minimum GPA of 3.5 in biology, chemistry, physics, geology, and mathematics courses.

b. Completion of the BS requirements in Biology and Honors Research (BSC 4915L, 1 to 3 credits, and Honors Research (BSC 4915L, 1 credit).

c. Completion of Honors research in collaboration with a two-person Honors Committee, consisting of the honors advisor and one other member. The honors advisor must be a tenured or tenure-earning member of the department. The research results must be written in the form of an honors thesis and approved by the Honors Committee.

d. Deposit two completed approved copies of the Honors Thesis with the Department's Office: one copy to be kept in the department and the other to be deposited in the Library.

e. Presentation of the results of the Honors Research in a departmental seminar.

Minor in Biology

Required Courses

BSC 1010 and BSC 1011 with labs, and one upper division course (3000-level or above) in three of the following areas: 1. Ecology, 2. Organismal Diversity, 3. Physiology/Biochemistry, or 4. Structure/Development. One of these elective courses must be at the 4000-level or higher and one must include a lab. Total upper division biology credits must number 10 or more. Grades of 'C' or better are required for all courses and labs. The following courses do not count as electives: Student Research Labs (BSC 3915, 4919, and 6916), Cooperative Education credits (BSC 3949 and 4949), Biology of Aging (PCB 3241), and any course for non-science majors (e.g., BOT 1010, PCB 2700, APB 2170, BSC 2023, EVR 3013, and OCB 2003).

Pre-Medical, Dental, Optometry, and Veterinary Curricula

Students who have fulfilled the requirements for the BS in Biology will also have satisfied the course requirements for admission to the above mentioned professional schools. Some professional schools may have additional course requirements. Interested students should consult a Pre-Medical Advisor for arranging a curriculum to enhance their potential to gain admission.

Accelerated Combined Degree Programs

Seven-Year Programs for BS/DO, BS/DPM and BS/DMD

1. BS in Biology/DO (Bachelor of Science in Biology-FIU/Doctor of Osteopathy-College of Osteopathic Medicine, Southeastern University of the Health Sciences).

2. BS in Biology/DPM (Bachelor of Science in Biology-FIU/Doctor of Podiatric Medicine-School of Podiatric Medicine, Barry University).

3. BS in Biology/DMD (Bachelor of Science in Biology-FIU/Doctor of Dental Medicine-College of Dentistry, University of Florida).

Seven-Year Accelerated Combined Degree Programs

The Department of Biological Sciences at Florida International University and the College of Osteopathic Medicine, Southeastern University, the School of Podiatric Medicine, Barry University and the College of Dentistry, University of Florida offer combined degree programs designed to integrate the undergraduate and the medical curricula in seven years instead of the traditional eight years, while maintaining the quality of both the undergraduate and the medical education. The accepted qualified students are admitted to the FIU Biology Program and receive provisional early acceptance to the medical program at the time they are entering FIU. These programs give the students the opportunity to concentrate on a comprehensive undergraduate liberal arts education around rigorous core and science curricula. During the first two years at FIU, students complete the general core courses and basic science requirements. The third academic year is spent in taking advanced courses to fulfill the requirements for the Bachelor of Science in Biology. After completing the third year curriculum at FIU, the students enter the medical program to receive the traditional four year medical education. Satisfactory completion of the basic medical science courses at the medical school will permit the students to earn 30 credit hours toward the BS degree in Biology. For further information contact Dr. C. F. Chen at 348-3509.

Certificate Program in Tropical Commercial Botany

See section on certificate programs under College of Arts and Sciences.

Course Descriptions

Note: Laboratories should be taken concurrently with or subsequent to lectures. Students should register for each separately.

Definition of Prefixes

APB - Applied Biology; BCH - Biochemistry; BOT - Botany; BSC - Introductory Biology; MCB - Microbiology; OCB - Oceanography (Biological); PCB - Process Cell Biology; ZOO - Zoology.

APB 2170 Introductory Microbiology (3) APB 2170L Introductory Micro Lab (1). Basic concepts of microbes as pathogens, food spoilage and fermentative organisms. Microbial relationships to immunology, sanitation, pollution and geochemical cycling. Not applicable for majors in Biological Sciences or Medical Laboratory Sciences. (Lab fees assessed) (S)

BCH 3033 General Biochemistry (4) BCH 3033L Biochemistry Lab (1). Chemistry of proteins, lipids, carbohydrates, and nucleic acids; principles of enzymology, metabolism, and bioenergetics. Prerequisite: CHM 2211 and BSC 1010. (F)

BCH 4034 General Biochemistry II (3). Protein synthesis and structure, nucleic acid synthesis and structure, protein-protein and protein-nucleic acid interactions, membrane structure, signal transduction, and metabolic regulation. Prerequisite: BCH 3033. [C]

BCH 5134C Workshop in Chromatography Techniques (1). Workshop covers the theory and practice of chromatographic techniques to separate complex mixtures of biomolecules, including absorption, ion exchange, size exclusion and affinity chromatography. Prerequisite: Graduate status. (S)

BCH 5280 Bioenergetics (3). The relationship of thermodynamics to living processes; energy transduction, enzymes in coupled systems. Prerequisite: Permission of the instructor. [C]

BCH 5411C Techniques in Molecular Evolution Research (5). Ribosomal genes from related organisms are amplified by polymerase chain reaction (PCR) and sequenced.

Phylogenetic maps are made by computer from sequence data. Students may use material from their own research. Prerequisites: BCH 3033 and Lab, PCB 4524 and Lab or Graduate Status.

BOT 1010 Introductory Botany (3). BOT 1010L Introductory Botany Lab (1). A history of mankind's study and use of plants, and a survey of plants of economic importance. Includes lab. No science prerequisite. (Lab fees assessed) (S)

BOT 3014 Plant Life Histories (3). Plant form, function, and reproduction: the lives of algae, fungi, bryophtes, ferns, gymnosprerms, and flowering plants. This course is designed for majors and certificate students. Prerequisites: A course in General Biology or permission of the instructor. Corequisite: BOT 3014L. [B]

BOT 3014L Plant Life Histories Laboratory (1). Laboratory to accompany Plant Life Histories. Students examine living and preserved material in the lab and outdoors. Plants examined at all levels of complexity. Prerequisites: A course in General Biology or permission of the instructor. Corequisite: BOT 3014.

BOT 3153 Local Flora (2). Laboratory observation of the gross features of vascular plants and practice in the use of keys for identification. Basic ecology of principle plant communities of Southern Florida. Field trips. [B]

BOT 3153L Local Flora Lab (2). Introduction to the taxonomy and ecology of common native, cultivated, and exotic plant species in southern Florida. Prerequisites: BOT 1010, BSC 1010, or equivalent. Corequisite: BOT 2153.

BOT 3353 Morphology of Vascular Plants (3). BOT 3353L Morphology of Vascular Plants Lab (1). Origin and evolution of plants, especially vascular plants of tropical origin. Analysis of vascular plant anatomy and morphology, emphasizing the underlying principles of plant construction. Prerequisite: A course in General Biology or permission of the instructor. (F) [C]

BOT 3434 Mycology (3) BOT 3434L Mycology Lab (1). An introduction to the taxonomy, genetics, and physiology of fungi with special emphasis on commercially important fungi and plant and animal pathogenic fungi. Prerequisites: Two semesters of General Biology, BSC 1010 and BSC 1011. (F) [B]

BOT 3663 Tropical Botany (3) BOT 3663L (1). How environmental factors affect the distribution of vegetation, and the morphology and physiology of plants in the tropics. Emphasis on tropical plants of economic importance. Prerequisites: BSC 1011 or equivalent, concurrent registration in lab required. (F) [B]

BOT 3810 Economic Botany (3). The origins, domestication and uses of economically important plants. Prerequisites: BSC 1010, BOT 1010 or equivalent. [B]

BOT 4374 Plant Development (3). BOT 4374L Plant Development Lab (1). The development of vascular plants, with emphasis on experimental approaches to plant anatomy, morphology, and reproduction. Practical instruction in tissue and organ culture. Prerequisites: BOT 4504 or permission of the instructor. [D]

BOT 4404 Phycology (3). BOT 4404L Phycology Lab (1). The biology of marine and freshwater algae, with an emphasis on structure, function, reproduction, classification, and ecology. (F) [B]

BOT 4504 Plant Physiology (3) BOT 4504L Plant Physiology Lab (1). Plant growth and metabolism in relationship to environment. Photobiology, nutrient relations, transport, and hormones in relation to plant development and function. Prerequisite: Organic Chemistry 1. (F) [C]

BOT 4723 Taxonomy of Tropical Plants (3). Introduction to higher plant taxonomy, including nomenclature, modern systems of angiosperm classification, and angiosperm evolution. Emphasis on identification of tropical plant families and plants of economic importance. Course includes lab. Prerequisite: A course in General Biology. [B]

BOT 4723L Taxonomy of Tropical Plants Lab (1). Field, herbarium, and laboratory exercises relating to the description, identificaiton, nomenclature, classification, and phylogeny of tropical plants. Prerequisites: BOT 3153L, BOT 3663L, or permission of the instructor. Corequisite: BOT 4723.

BOT 5406 Algal Physiology (3). Physiology and metabolism of eukaryotic algae, including ecological aspects of the aquatic environment and algal roles in aquatic biogeochemical cycling. Prerequisites: BOT 4405, 1 year of chemistry or consent of instructor. (S) [C]

BOT 5515 Biochemistry of Plant Natural Products (3). Aspects of primary and secondary plant metabolism will be covered including biosynthesis and degradation of natural products as well as their biological/ pharmacological activity. Prerequisite: CHM 2211 or BCH 3033. (S) [C]

BOT 5575 Photobiology (3) BOT 5575L Photobiology Lab (1). The study of basic photochemical mechanisms as they occur in molecular biological processes such as photosynthesis, plant growth, animal vision, bioluminescence, and radiation damage. Prerequisite: Permission of the instructor. [C]

BOT 5602 The Functional Ecology of Tropical Plants (3). BOT 5602L The Functional Ecology of Tropical Plants Lab (1). The relationship of climate and soils to the distribution and function of the major plant groups of the tropical regions. Prerequisites: Two courses in botany or permission of the instructor. [A]

BOT 5605 Plant Ecology (3). In-depth study of plant ecology at 3 levels: individual, population, and community. Laboratory and field exercises will examine lecture topics. Includes lab. [A]

BOT 5605L Plant Ecology Lab (1). Field and lab exercises will examine plant ecology of individuals, populations, and communities. Prerequisites: BSC 3043, or permission of the instructor. Corequisite: BOT 5605.

BOT 5606 Ethnobotany (3). Review the use and management of plants by indigenous people. Discuss emerging theories in ethnobotany, examine the role of ethnobotany in conservation and resource utilization. Prerequisites: BOT 3810, BOT 3723, or ANT 3403, or permission of the instructor. (F

BOT 5647 Ecology of Marine Vascular Plants (3). Biology and ecology of seagrasses and mangroves, with an emphasis on South Florida and Caribbean species. Physiological ecology, population and community ecology, and ecosystem processes. Prerequisite: Permission of the instructor. [A]

BOT 5648 Workshop on Aquatic Plants (1). Biology and identification of aquatic plants. Prerequisites: Graduate standing or permission of the instructor.

BOT 5682C Florida Plant Communities (3). Two-week field trip to many diverse plant communities of the state. Ecological and environmental factors influencing plant distribution will be examined, contrasting vegetation among sites. Prerequisites: BSC 1011, BSC 3043 or permission of the instructor. [A]

BOT 5816L Ethnobotany Workshop (1). Field methods in the study of plant use by traditional and modern societies. Examines botanical documentation, ethnological description and experimental design. Prerequisite: Permission of the instructor.

BOT 5924 Workshop in Tropical Families (3). An introduction to important spermatophyte families, including systematics, ecology, and conservation. Includes laboratory and field experience. Prerequisite: Permission of the instructor.

BOT 5925 Workshop in the Biology of Southern Florida's Native Trees (3). Distribution, floristic relationships, morphology, reproductive biology, taxonomy, and conservation of trees native to southern Florida. Prerequisites: BOT 2153, BOT 3723, or permission of the instructor.

BOT 5928 Workshop on Grasses and Sedges of Southern Florida (1). The systematics, ecology, and identification of South Florida grasses and sedges. Prerequisite: Graduate standing or permission of the instructor.

BSC 1010 General Biology I (3) BSC 1010L General Biology Lab (1). Biomolecules, cells, energy flow, genetics, and physiology. Science background or Biology major recommended. (Lab fees assessed) (F,SS)

BSC 1011 General Biology II (3) BSC 1011L General Biology Lab (1). A survey of organismal biology with emphasis on botany, and zoology. Science background or Biology major recommended. (Lab fees assessed) (S,SS)

BSC 2023 Human Biology (3) BSC 2023L Human Biology Lab (1). Biological and general scientific principles governing human structure, function, health, and relationship to the planetary environment. For non-science majors. (Lab fees assessed)

BSC 3915, 4914 Student Research Lab (1-12). Independent laboratory study in a project or projects of the student's choice. Registration by consultation with instructor. May be repeated for additional credit.

BSC 3949, 4949 Cooperative Education in Biology (1-3). A student majoring in biological sciences may spend several terms employed in industry or government in a capacity relating to the major. Prerequisites: Permission of Co-op Education and major department.

BSC 4401 Biotechnology: Applications in Industry, Agriculture and Medicine (3). Biological, biochemical, ecological, engineering, entrepreneurial, and ethical aspects of biotechnology in industry, agriculture, and medicine. [D]

BSC 4915L Honors Research (1-3). Laboratory and/or field study in consultation with an Honors Thesis advisor. Prerequisite: Admission into Honors in Biological Sciences Program.

BSC 4931 Undergraduate Seminar (1). An exploration of various research works in biological sciences. Oral presentation by the students required.

BSC 4934 Topics in Biology (1-3). An intensive study of a particular topic or limited number of topics not otherwise offered in the curriculum.

BSC 4974 Honors Thesis (3). Writing an Honors Thesis. Prerequisite: BSC 4915.

BSC 5596C Environmental Instrumentation (3). Theory and techniques for measurement of environmental parameters of interest to field biologist. Prerequisite: Permission of the instructor

BSC 5825 Wildlife Biology (3). The study of game and non-game wildlife with emphasis on management and population regulation. Prerequisite: Permission of the instructor. [B]

BSC 5927 Graduate Bioresource Workshop (1). This workshop is designed to introduce Biology graduate students to the various resources available for graduate teaching and research. Prerequisite: Graduate standing.

BSC 5928 Workshop: Vertebrate Animal Research (1). Reviews the ethical, legal and practical guidelines for conducting research with live vertebrate animals. Required for students capturing, handling or collecting vertebrate animlas in the course of research or teaching. Prerequisite: Graduate standing or permission of the instructor.

BSC 5933 Current Topics in Tropical Biology (3). An intensive study of particular tropical biology topics not otherwise offered in the curriculum. Prerequisite: Permission of the instructor.

BSC 5936 Glaser Seminar: The Biology of Tomorrow (1). A series of lectures by an invited, internationally recognized authority in biological topics of current and future concern. (S)

ENY 1004 General Entomology (3) ENY 1004L Entomology Lab (1). The morphology, systematics, physiology and ecology of the major insect orders, and introduction to basic field procedures. Prerequisite: BSC 1011. (S)

ENY 4060 Advanced Entomology (3). Explorations of the morphology, physiology, behavior and metabolism of insects in the context of their evolutionary, environmental and economic significance. Prerequisite: BSC 1010, BSC 1011, or permission of the instructor. [B]

ENY 4060L Advanced Entomology Laboratory (1). Detailed studies of insect morphology, systematics and field population dynamics and behavior. Prerequisites: BSC 1010, BSC 1011, or permission of the instructor.

MCB 3023 General Microbiology (3) MCB 3023L General Microbiology Lab (2). Introduction to the principles and techniques of microbiology, genetics, taxonomy, biochemistry and ecology of microorganisms. Prerequisites: Organic Chemistry I and II; General Biology I and II; or permission of the instructor. (S) [B]

MCB 4203 Microbial Pathogenicity (3) MCB 4203L Microbial Path Lab (1). Host-parasite relationships: physiology of bacterial, fungal and viral pathogens emphasizing mechanisms of pathogenicity and the host response. Prerequisites: MCB 3023. [C]

MCB 4404 Microbial Physiology (3) MCB 4404L Microbial Physiology Lab (1). Introduction to the study of physiological and metabolic activities of microorganisms and processes that affect them. Prerequisite: MCB 3023, MCB 3023L. (S) [C]

MCB 4603 Microbial Ecology (3) MCB 4603L Microbial Ecology Lab (1). Principles and applications of microbial interactions with the environment: physical, chemical, and biological. Prerequisite: MCB 3023, MCB 3023L. [A]

MCB 4653 Food Microbiology (3). MCB 4653L Food Microbiology Lab (1). Public Health microbiology of water and sewage, microbiology of food preparation and spoilage; industrial aspects of microbiology. Prerequisite: MCB 3023, MCB 3023L. [A]

MCB 5114 Microbial Diversity (3). Analysis of metabolic and morphological diversity in bacteria in the context of bacterial systematics. Prerequisites: MCB 3023 and MCB 3023L; additional course in microbiology or biochemistry. Corequisite: MCB 5996L.

MCB 5114L Microbial Diversity Laboratory (1). Laboratory to accompany Microbial Diversity lecture. Prerequisites MCB 3023 and MCB 3023L; additional course in Microbiology or Biochemistry. Co-requisite: MCB 5996. [A]

MCB 5405 Biology of Photosynthetic Bacteria (3). MCB 5405L Biology of Photosynthetic Bacteria Lab (1). Study of the physiology and ecology of photosynthetic bacteria, including Blue-green algae (cyanobacteria), purple and green bacteria, and Halobacteria. [A]

MCB 5505 Virology (3) MCB 5505L Virology Lab (1). Principles and methods of study of bacterial, plant, and animal viruses. Molecular aspects of viral development, virus pathogens, and carcinogens. Prerequisites: Biochemistry, Genetics, and Organic Chemistry. [C]

OCB 2003 Introductory Marine Biology (3) OCB 2003L Introductory Marine Biology Lab (1). A survey of marine biological environments and zones, including the relationship of the physical and chemical environment to the distribution of marine plants and animals. (Lab fees assessed) (F)

OCB 3043 Marine Biology and Oceanography (3). OCB 3043L Marine Biology and Oceanography Laboratory (1). An ecological approach to the biology of organisms in the marine environment with an emphasis on zonation and adaptation to the physical environment. Intended for biology majors or other science majors. Prerequisites: BSC 1010 and BSC 1011 or equivalent. (S) [A]

OCB 3264 Biology of Coral Reefs (3). Biology of reef animals and reef ecology: emphasis on Florida and Caribbean reefs. Classroom instruction and observation of coral reef and turtle grass communities. Prerequisites: BSC 1011 and scuba certification. [A]

OCB 5634 Marine Ecology (3). Review of processes determining species distribution and abundance in marine ecosystems. Energy flow and trophic relationships examined. Prerequisite: PCB 3043. [A]

OCB 5634L Marine Ecology Lab (1). Laboratory to accompany Marine Ecology. Prerequisite: PCB 3043. Corequisite: Marine ecology.

OCB 5670L Techniques in Biological Oceanography (1). A laboratory course designed to acquaint the student with biological sampling techniques at sea. Shipboard experience will be required as part of the course. Prerequisites: Previous course in marine biology; and permission of the instructor.

PCB 2510 Introductory Genetics (3). PCB 2510L Introductory Genetics Lab (1). Principles of Mendelian and Molecular genetics with selected examples of applications such as genetic engineering and twin studies. (SS)

PCB 2700 Foundations of Human Physiology (3) PCB 2700L Foundations of Human Physiology Lab (1). Functional survey of the organ systems of the human body. Intended primarily for non-science majors. (Lab fees assessed) (F)

PCB 3043 Ecology (3) PCB 3043L Ecology Lab (1). The basic principles governing the interaction of organism and environment. Trophic structure and energetics, species diversity, evolution of populations, biogeochemical cycles. Prerequisite: BSC 1010 and BSC 1011. (S,F)

PCB 3203 Cell Physiology (3) PCB 3203L Cell Physiology Lab (1). Biochemical and biophysical principles of cell physiology: enzyme structure and function, energy transductions, electrical and chemical signals. Prerequisites: Eight semester hours each of General Biology, General Physics, and Organic Chemistry. (S) [C]

PCB 3241 Physiology of Aging (3). Introductory treatment of the physiology of organ systems with emphasis on the decline in organ function with aging and on the resultant limitations in physiological performance. (F)

PCB 3513 Genetics (3) PCB 3513L Genetics Lab (1). Mendelian inheritance and introduction to molecular genetics. Prerequisites: BSC 1010 and CHM 2210. (F)

PCB 3702 Intermediate Human Physiology (3) PCB 3702L Intermediate Human Physiology Lab (1). Functions of the human body and the physio-chemical mechanisms responsible for each organ's function. Prerequisite: General Biology. [C]

PCB 3703 Human Physiology I (3) PCB 3703L Human Physiology I Lab (1). Basic facts and concepts relating to the physiology of cells and nervous, muscular, and cardiovascular systems, with emphasis on regulatory mechanisms and abnormal physiology. Prerequisites: One year of Biology or Zoology; Chemistry, and Physics. (F) [C]

PCB 3704 Human Physiology II (3) PCB 3704L Human Physiology II Lab (1). Physiology of respiratory, (3). Physiological processes studied gastrointestinal, excretory, endocrine and reproductive systems. Continuation of PCB 3703. Prerequisites: One year of Biology or Zoology; Chemistry, and Physics. [C]

PCB 3711 Physiological Mechanisms from a biophysical and biochemical perspective. Integrative aspects of physiology are de-emphasized to accomplish a detailed, but introductory coverage of mechanisms. (F) [C]

PCB 4024 Cell Biology (4). A structural and molecular analysis of cell function. Prerequisite: PCB 3513. [C]

PCB 4233 Immunology (3) PCB 4233L Immunology Lab (1). Fundamentals of immunology including antibody structure, immunopathology, molecular recognition at cell surfaces and immunological aspects of cancer biology. Prerequisite: General Microbiology or permission of the instructor. (S) [C]

PCB 4254 Developmental Biology (3) PCB 4254L Developmental Biology Lab (1). Comprehensive survey of principles of development and critical analysis of methods used to study these problems. Prerequisites: PCB 3513 and PCB 3203 or BCH 3033. [D]

PCB 4301 Freshwater Ecology (3). PCB 4301L Freshwater Ecology Laboratory (2). Community-level analysis of marshes, lakes and rivers from theoretical and practical viewpoints, emphasizing quantitative description of community structure and function. Prerequisite: Ecology or General Biology and permission of the instructor. [A]

PCB 4413 Advanced Genetics (3). Advanced level treatment of topics such as meiotic disjunction-uniparental disomy, transcription & splicing - differential splicing, polymorphisms, chromatin organization, horizontal gene transfer, etc. Prerequisite: PCB 3513. [C]

PCB 4524 Molecular Biology (3) PCB 4524L Molecular Biology Lab (1). Advanced nucleic acid and protein biochemistry: biosynthesis of macromolecules and molecular genetics. Prerequisite: Biochemistry or Genetics and Organic Chemistry. (F) [C]

PCB 4673 Evolution (3). A study of the synthetic theory of evolution, its historic and experimental justification and the mechanisms of natural selection. Prerequisites: Genetics, Ecology, or permission of the instructor.

PCB 4723 Animal Physiology (3) PCB 4723L Animal Physiology Lab (1). Advanced study of physiological mechanisms employed by animals to maintain function of the organ systems and to interact with the environment. Prerequisites: Organic Chemistry and Cell Physiology or Biochemistry. [C]

PCB 4724 Comparative Physiology (3) Comparative Physiology Lab 1 (1). Regulation of the internal environment: osmotic gastrointestinal, metabolic, circulatory and respiratory physiology. Prerequisites: General Biology and Organic Chemistry. (F) [C]

PCB 4733 Human Systemic Physiology I (3) PCB 4733L Human Systemic Physiology Lab (1). Selected topics in human physiology with emphasis on topics of clinical significance. Prerequisite: Introductory human physiology or a college level course in biology or chemistry. [C]

PCB 4734 Human Systemic Physiology II (3). Selected topics in human physiology with emphasis on topics of clinical significance. Prerequisite: Introductory human physiology or a college level course in biology or chemistry. [C]

PCB 5195 Histochemistry/Microtechnique (3) PCB 5195L Histochemistry/Microtechnique Lab (1). Chemistry and use of fixatives and dyes; histochemistry emphasizes procedures used in research and pathology labs including techniques for enzymes, protein, carbohydrate, nucleic acids and lipids. Prerequisite: Biochemistry or Cell Physiology.

PCB 5215 Workshop in Histo—and Immunocyto—Chemistry (1). Laboratory techniques for preparation of paraffin-embedded and frozen sections; selected procedures to demonstrate the fundamentals of histochemical and immunocytochem-ical labeling methods. Prerequisite: Graduate standing or permission of the instructor.

PCB 5238 Marine Comparative Immunology Workshop (1). A workshop at the Keys Marine Lab to present general and unique research methodologies associated with the immunology of marine animals. Prerequisite: Permission of the instructor.

PCB 5185 Workshop in Microtechnique (1). Laboratory techniques required for preparation of tissues for light microscopy-histological study. Prerequisite: Senior or graduate student status.

PCB 5259 Topics in Developmental Biology (3). Molecular and cellular mechanisms in the development of plants and animals. Prerequisite: Senior status or permission of the instructor.

PCB 5303 Limnology (3) PCB 5303L Limnology (1). Chemical and physical properties of standing and flowing freshwater systems; ecophysiology and interactions of the fresh water flora and fauna in relation to abiotic factors; oligotrophic to eutrophic conditions.

PCB 5327 Coastal Ecosystems and Modeling (3). Basics of ecology for coastal and wetland ecosystems. The theory and mechanisms of simulation modeling. Hands-on creation and application of computer models in ecological research. Prerequisites: PCB 3043 and MAC 2311 or permission of the instructor.

PCB 5344L Tropical Ecology Field Lab (3). Field course in Costa Rica with fieldwork in two or more diverse habitats (rainforest, and dry forest). Emphasis on diversity and interactions between species. Visits to selected sites of deforestation, conservation and restoration.

PCB 5358 Everglades Research and Resources Management (3). Application of basic skills in ecology to contemporary issues in the Everglades area, with emphasis on the relation between research and management of wilderness, wildlife, vegetation, water and fire. Prerequisite: PCB 3043 Ecology or permission of the instructor.

PCB 5376 Animal Physiological Ecology (3). Evolution-oriented approach to physiological adaptations of aniumals living in diverse environments. Considers the inter relationship between behavior, energetics, and integrative regulation of metabolism. Prerequisite: Ecology and Biochemistry.

PCB 5376L Animal Physiological Ecology Laboratory (1). Analysis of biophysical, behavioral and ecological factors that influence the energy and nutrient flow through wild animals. Prerequisite: Ecology and Biochemistry. Corequisite: PCB 5376.

PCB 5405 Biochemical Ecology (3). Principles of chemical communication between diverse organisms and the importance of a variety of allelochemicals in community structure. Prerequisite: Permission of the instructor.

PCB 5407 Workshop: Microelectrodes in Microbial Ecology (1). Use of Microelectrodes to measure chemical microenvironments and biological processes in natural samples. Hands-on experience with O2 and pH electrodes. Prerequisite: Permission of the instructor.

PCB 5423 Advanced Ecology: Populations and Communities (3). Advanced analysis of population and community ecology. Prerequisites:

PCB 3043 or permission of the instructor or graduate standing.

PCB 5443 Advanced Ecology: Communities and Ecosystems (3). Advanced analysis of ecological principles pertaining to communities, ecosystems, and landscapes, with special emphasis on the South Florida and Caribbean region. Prerequisites: Graduate student status, or PCB 3043 and permission of the instructors.

PCB 5596 Workshop: In Situ Hybridization (1). Analysis of gene expression by in situ hybridization techniques using whole mount and crysectioned tissues. Prerequisite: Graduate standing or permission of the instructor.

PCB 5615 Molecular and Organismal Evolution (3). The evolutionary relationships among nucleotides and proteins as well as the processes which yield these relationships. The possible molecular events leading to speciation. Prerequisites: Genetics and Biochemistry.

PCB 5616 Applied Phylogenetics (3). Methods of phylogenetic analysis with focus on pragmatic applications to ecological and evolutionary studies. Hands-on experience with current computer programs for phylogenetic analysis. Prerequisite: Graduate standing or permission of the instructor.

PCB 5665 Human Genetics (3). Principles and techniques in the analysis of the human race. Prerequisite: PCB 3513.

PCB 5676 Evolution and Development of Sex (3). The evolutionary explanations for the evolution of sexual reproduction and models of sexual differentiation. Prerequisites: Genetics and Evolution or permission of the instructor.

PCB 5677 Evolution and Development (3). The models and evidence for the interaction of development and evolution, using both plant and animal systems. Prerequisite: Permission of the instructor.

PCB 5686 Population Biology (3). PCB 5686L Population Biology Lab (1). Intrinsic properties of natural and theoretical populations and their dynamics and interactions, and responses to disturbance. Includes field problems and computer exercises. Prerequisite: A course in genetics, evolution, or permission of the instructor.

PCB 5687 Evolutionary Ecology (3). Adaptations and interactions of plants and animals in natural and disturbed habitats. Prerequisite: PCB 3043 or equivalent.

PCB 5785 Membrane Signal Transduction (3). Hormones and neurotransmitters as extracellular messengers. Membrane receptors and mechanisms of signal transduction: membrane channels and enzymes, direct linkage and G-protein linkage. Second messengers. Prerequisites: BCH 3033 or PCB 3203. (F)

PCB 5786 Membrane Physiology (3). Chemical and physical properties of the plasma membrane, its biosynthesis and functions in transport and signal transduction. Prerequisites: PHY 2048, PHY 2049, BCH 3033 or PCB 3203.

PCB 5806 Endocrinology (3). Biochemistry, physiology and anatomy of the endocrine systems of vertebrates and invertebrates. Steroid, peptide, and terpenoid hormones which control reproduction, growth, and other parameters. Prerequisite: BSC 1011, CHM 2211, one physiology course. (S)

PCB 5835C Neurophysiology (3) PCB 5835L Neurophysiology Lab (1). Comparative neurophysiology; physico-chemical mechanisms of resting and action potentials; synaptic transmission; neural coding and integration; sensory-motor function and neurophysiological basis of behavior. Prerequisites: Biochemistry or Cell Physiology, Calculus. [C]

PCB 5902 Readings in Stable Isotope Studies (1). Discussion of scientific papers published in the fields of isotope ecology and isotope biogeochemistry. Prerequisites: Graduate standing or permission of the instructor.

PCB 5934 Topics in Skeletal Muscle Physiology (4). Advanced discussion of some aspects of the biophysics, biochemistry and physiology of skeletal muscle contraction. Topics may vary from year to year. Based on review articles and research papers. Prerequisite: APB 4240 or PCB 3703 and PCB 3203 or BCH 3033.

PCB 5938 Ecosystem Studies Seminar (3). Theory and practice of ecosystem analysis, based on discussion of current articles and books. Emphasis on using different approaches to understand natural complexity, with case studies researched by students. Prerequisites: Course in Ecology, permission of the instructor.

ZOO 2203C Invertebrate Zoology (4). Taxonomy, anatomy, development, physiology and ecology of major invertebrate groups, including terrestrial and aquatic phyla. Prerequisite: BSC 1011 or equivalent. Includes lab. (S)

ZOO 2713C Comparative Vertebrate Anatomy (4). Study of the structural diversity and classification of vertebrates and the evolution of various organ systems. Dissection of a variety of vertebrate specimens to reveal relationships of the various organ systems. Prerequisite: One year of General Biology with laboratory or General Zoology with laboratory.

ZOO 3303 Vertebrate Zoology (3) ZOO 3303L Vertebrate Zoology Lab (1). Systematics, anatomy, physiology, development and ecology of vertebrate animals. Prerequisites: BSC 1010, BSC 1010L, BSC 1011, and BSC 1011L or equivalent. (F)

ZOO 3603 Embryology (3) ZOO 3603L Embryology Lab (1). Animal morphogenesis. Laboratory must be taken with lecture. Prerequisites: One year of General Biology with laboratory or General Zoology and General Botany with laboratory. [D]

ZOO 3720 Human Evolutionary Morphology (3). The major evolutionary adaptations that have led to the unique bio-cultural characteristics of the human species. Prerequisites: General Biology, Introduction to Anthropology, or permission of the instructor. [D]

ZOO 3731 Human Anatomy (3) ZOO 3731L Human Anatomy Demonstration (1). Survey of organ systems of the human body with major emphasis on the skeletal, muscular, and peripheral nervous system. Guided examination of prosected human cadavers. Prerequisites: A course in General Chemistry, General Physics and General Biology. (F) [D]

ZOO 3733 Human Gross Anatomy I (3) ZOO 3733L Human Gross Anat I Lab (1). Structure and function of various tissues, organs and organ systems of the human body. Dissection of human cadaver material to reveal the relationships of the various organ systems of the body. Prerequisites: BSC 1011, BSC 1011L, CHM 1046, CHM 1046L, PHY 2054, or equivalents. (Lab fees assessed) [D]

ZOO 3734 Human Gross Anatomy II (3) ZOO 3734L Human Gross Anat II Lab (1). Continuation of ZOO 3733. Prerequisites: BSC 1011, BSC 1011L, CHM 1046, CHM 1046L, or equivalents.

ZOO 3753 Histology (3) ZOO 3753L Histology Lab (1). Microscopic anatomy of cells, tissues and organs. Prerequisites: General biology and organic chemistry. (F) [D]

ZOO 3892C Biology of Captive Wildlife (3). Behavior, nutrition, physiology, anatomy, pathology and diseases of captive wildlife. Taught at Metrozoo. Prerequisite: General Biology or permission of the instructor. [B]

ZOO 4234 General Parasitology (3). Modern concepts of biology, development, immunology and pathology of animal parasites. Corequisite: ZOO 4234L. [D]

ZOO 4234L General Parasitology Lab (1). Taxonomy and morphology of animal parasites. Prerequisite: BSC 1010 and BSC 1011. Corequisite: ZOO 4234.

ZOO 4377 Advanced Vertebrate Morphology (3). The study of the diversity of anatomical structure in vertebrates and the relationship between form and function. Prerequisites: BSC 1010 and BSC 1010L, BSC 1011 and BSC 1011L, and ZOO 2303 or permission of the instructor.

ZOO 4377L Advanced Vertebrate Morphology Lab (1). Accompanies Vertebrate Morphology lecture. Dissection and analysis of a variety of vertebrate species to reveal form-function relationships. Prerequisites: BSC 1010 and BSC 1010L, BSC 1011 and BSC 1011L, ZOO 2303 or permission of the instructor.

ZOO 4423C Herpetology (4). Study of the biology of reptiles and amphibians with emphasis on the natural history and ecology of local species. Prerequisites: One year of biological sciences and ecology or permission of the instructor. [B]

ZOO 4434 Primate Biology (3). Survey of the natural history of the prosimians, monkeys, and apes with special emphasis on primate anatomy, evolution, ecology, and behavior. Prerequisties: General biology or permission of the instructor. [B]

ZOO 4434L Primate Biology Field Lab (1). An introduction to the field study of non-human primate behavior. Prerequisites: General biology or permission of the instructor.

ZOO 4472 Ornithology (3). Avian systematics, anatomy, physiology, behavior, ecology, evolution, and conservation. Labs teach visual and auditory identification, census techniques, banding, and taping. Field trips alternate Saturdays. Prerequisites: General Biology. (F) [B]

ZOO 4472L Ornithology Lab (2). Students will learn the skills needed to conduct ecological and behavioral studies on birds in their natural habitats. Some Saturday field trips and at least one overnight weekend field trip. Corequisites: ZOO 4472. (F)

ZOO 4513 Animal Behavior (3). Evolutionary approach to understanding the diversity of behavioral strategies. Ecological and physiological mechanisms of behavior will be emphasized. Prerequisite: General Biology. (F) [A]

ZOO 4513L Animal Behavior Laboratory (1). Field study of wild animals and lab study of neuroethology of fishes and invertebrates. Three weekend day trips and one overnight weekend field trip. Prerequisite: ZOO 4513, may be taken as a corequisite. (S)

ZOO 4743C Neuroscience (4). Structure and function of the human nervous system. Dissection and demonstration of human nervous system and various neurophysiology labs. Prerequisites: One course in physiology and one course in human anatomy. (S) [D]

ZOO 5266 Biology of Crustaceans (3). ZOO 5266L Biology of Crustaceans Laboratory (1). Morphology, physiology, systematics and evolution in crustaceans.

ZOO 5376 Animal Design and Movement (4). Basic biomechanical and behavioral theories of how animals feed and move. Prerequisites: BSC 1010, BSC 1011, PHY 2053, and PHY 2054 or equivalent.

ZOO 5424 Herpetology (3). Biology of amphibians and reptiles from a systematic perspective. The three orders of living amphibians and the six living orders of reptiles are covered in detail. Prerequisite: General Biology I & II, Ecology, or permission of the instructor.

ZOO 5424L Herpetology Laboratory (1). Laboratory course for Herpetology: The anatomy of representative species will be covered in laboratory exercises. Students will dissect preserved specimens. Students will learn characteristics of living families and Florida species. Prerequisite: General Biology I & II, Ecology, or permission of the instructor.

ZOO 5456 Ichthyology (3). Systematics, structure, function, ecology, and evolution of fishes. Prerequisites: BSC 1010, BSC 1011, PCB 3043. (S) [B]

ZOO 5456L Ichthyology Lab (1). Accompanies ichthyology lecture. Prerequisites: BSC 1010, BSC 1011, PCB 3043.

ZOO 5479 Workshop in Field Ornithology: Mark and Recapture Methods (1). Instruction in techniques of banding wild birds, including their capture with mist nets, identificaton in the hand, and maintenance of federally required records. Prerequisites: ZOO 4472 and ZOO 4472L or permission of the instructor.

ZOO 5732 Advanced Anatomy Demonstration (1-4). Dissection and demonstration of the human body with the emphasis on structure and function. May be repeated to a maximum of 8 credits. Prerequisite: ZOO 3733L and ZOO 3734L or consent of instructor.

ZOO 5745 Advanced Neuroanatomy (3). In-depth knowledge of the embryonic development, structure, and function of the human nervous system with a great deal of clinical consideration. Prerequisite: ZOO 4743C or permission of the instructor.

ZOO 5746 Comparative Neurobiology (4). Structure and function of neural systems at many levels including biophysical and cellular mechanisms, molecular processes, neural circuits, development, and anatomy. Prerequisite: General Biology, General Chemistry, Introduction to Physics; graduate standing or permission of the instructor.

ZOO 5754 Comparative Pathology (3). General mechanisms of disease and comparative evaluation of animal diseases of specific organ systems in various animals including fish, reptiles, birds, and mammals. Prerequisites: ZOO 3753 or permission of the instructor. [C]

ZOO 5754L Comparative Pathology Laboratory (1). A laboratory to complement the lecture utilizing gross specimens and histopathologic material including glass and projection slides. Prerequisites: ZOO 3753 or permission of the instructor.

Chemistry

Kenneth G. Furton, *Associate Professor, and Chairperson*
Jose Almirall, *Assistant Professor*
David Becker, *Associate Professor*
Yong Cai, *Assistant Professor*
David Chatfield, *Assistant Professor*
Milagros Delgado, *Lecturer*
Yiwei Deng, *Assistant Professor*
Piero R. Gardinali, *Assistant Professor*
A. Palmer Graves, *Lecturer and Coordinator of General Chemistry Laboratories*
Arthur W. Herriott, *Professor and Dean*
Gary G. Hoffman, *Associate Professor*
Rudolf Jaffe, *Associate Professor*
Jeffrey A. Joens, *Professor*
Leonard S. Keller, *Professor and Coordinator of Organic Chemistry Laboratories*
John T. Landrum, *Professor*
Ramon Lopez de la Vega, *Associate Professor*
Zaida C. Morales-Martinez, *Instructor and College Coordinator for Premedical Advising and College Coordinator for Science Student Recruitment and Retention*
Kevin E. O'Shea, *Associate Professor*
John H. Parker, *Professor*
J. Martin Quirke, *Professor*
Kathleen Rein, *Assistant Professor*
Stephen Winkle, *Associate Professor*
Stanislaw F. Wnuk, *Associate Professor*

Bachelor of Science

Degree Program Hours: 120

The chemistry program is accredited by the American Chemical Society and prepares the student for graduate study or a professional career as a chemist in industry, in government service, or in secondary school teaching. (Students interested in secondary teacher certification should contact the College of Education at 348-2721.)

Lower Division Preparation

Common Prerequisites

CHM 1045	General Chemistry I	4
CHM 1045L	General Chemistry Lab I	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I*	4
CHM 2210L	Organic Chemistry I Lab*	1
CHM 2211	Organic Chemistry II*	3
CHM 2211L	Organic Chemistry II Lab*	1
PHY 2048	Physics with Calculus I*	5
PHY 2048L	Physics with Calculus I Lab*	1
PHY 2049	Physics with Calculus II*	5
PHY 2049L	Physics with Calculus II Lab*	1
MAC 2311	Calculus I	4
MAC 2312	Calculus II	4

*Either the General Physics sequence or the Organic Chemistry Sequence must be taken at the lower division. Whichever is not taken must be taken before the degree is granted

To qualify for acceptance into the upper division, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable to the program.

Upper Division Program: (60 total hours, 50 hours must be 3000 level and above)

Either the General Physics sequence or the Organic Chemistry Sequence must be taken at the lower division. Whichever is not taken must be taken before the degree is granted. The following courses are required:

At least 36 credits in chemistry to include:

CHM 3120	Quantitative Analysis	3
CHM 3120L	Quantitative Analysis Lab	2
CHM 3410	Physical Chemistry I	4
CHM 3410L	Physical Chemistry I Lab	1
CHM 3411	Physical Chemistry II	4
CHM 3411L	Physical Chemistry II Lab	2
CHM 4130	Modern Analytical Chemistry	3
CHM 4130L	Modern Analytical Chemistry Lab	2
CHM 4220	Advanced Organic Chemistry	3
CHM 4230L	Structure Determination Laboratory	1
CHM 4610	Advanced Inorganic Chemistry	3
CHM 4610L	Advanced Inorganic Chemistry Laboratory	1
CHM 4910L	Undergraduate Research in Chemistry	3
CHM 4930	Senior Seminar	1
One additional senior-level (4000) Chemistry course		3

At least three additional credits to be chosen from the following list:

MAP 2302	Differential Equations	3
CGS 2420	Fortran for Engineers	3
MAC 2313	Multivariable Calculus	3

Bachelor of Arts

Degree Program Hours: 120

This program is designed for students preparing for careers in medicine, dentistry, environmental studies, veterinary medicine, patent law, secondary science education, or criminalistics chemistry. Students should complement the basic curriculum with suitable electives chosen in consultation with an advisor. (Students interested in secondary teacher certification should contact the College of Education at 348-2721.)

Lower Division Preparation

Common Prerequisites

CHM 1045	General Chemistry I	4
CHM 1045L	General Chemistry Lab I	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I*	4
CHM 2210L	Organic Chemistry I Lab*	1
CHM 2211	Organic Chemistry II*	3
CHM 2211L	Organic Chemistry II Lab*	1
PHY 2048	Physics with Calculus I*	5
PHY 2048L	Physics with Calculus I Lab*	1
PHY 2049	Physics with Calculus II*	5
PHY 2049L	Physics with Calculus II Lab*	1
MAC 2132	Pre-Calculus	3
MAC 2311	Calculus I	4
MAC 2312	Calculus II	4

*Either the General Physcis sequence of the Organic Chemistry sequence must be taken at the lower division. Whichever is not taken must be taken before the degree is granted.

For the Bachelor of Arts degree, PHY 2053 and PHY 2054 may be substituted for PHY 2048 and PHY 2049.

To qualify for acceptance into the upper division, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable to the program.

Upper Division Program: (60 total hours, 50 hours must be 3000 level and above)

Either the General Physics Sequence or the Organic Chemistry Sequence must be taken at the lower division.

Whichever is not taken must be taken before the degree is granted.

BSC 1010	General Biology I	3
BSC 1010L	General Biology I Lab	1
BSC 1011	Genral Biology II	3
BSC 1011L	General Biology II Lab	1
CHM 3120	Quantitative Analysis	3
CHM 3120L	Quantitative Analysis Lab	2
CHM 3400	Fundamentals of Physical Chemistry	3
CHM 3400L	Fundamentals of Physical Chemistry Lab	1
CHM 4220	Advanced Organic Chemistry	3
CHM 4230L	Structure Determination Lab	1
And at least one additional senior level (4000) course in chemistry		3
Electives		44

Minor in Chemistry

The Minor requires at least 23 credits in chemistry to include:

General Chemistry I & II (CHM 1045, 1045L, and 1046, 1046L)	9
Quantitative Analysis (CHM 3120, 3120L)	5
Organic Chemistry I & II (CHM 2210, CHM 2210L, CHM 2211, CHM 2211L)	9

At least half of the credits to be counted towards the minor must be taken at the University.

Criminalistics-Chemistry Program

The Criminalistics-chemistry Core Requirements are the same as the requirements for the BA degree in chemistry plus Modern Analytical Chemistry (CHM 4130, 4130L). (Degree granted by the Department of Chemistry.)

Internship

A 3-6 credit internship in the laboratory of a participating criminal justice agency.

Criminal Justice Course work: The student should take nine credits of criminal justice courses in consultation with an advisor in the Department of Criminal Justice, 940-5850.

Electives

Course work in the behavioral and political sciences, and upper division course work in the biological sciences is recommended to total 60 semester hours.

Pre-Medical, Dentistry, Veterinary, Optometry Curricula

Students who have satisfied the requirements for either the BA or the BS degree in chemistry will also have satisfied the course requirements for admission to professional schools in the above areas. Additional course work in chemistry and biology relevant to the career objectives of the student may also be taken as electives. Interested students should consult the Chemistry Department Undergraduate Program Director.

Cooperative Education

Students seeking the baccalaureate degree in chemistry may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Division of Student Affairs. The student spends one or two semesters fully employed in an industrial or governmental chemistry laboratory. For further information consult the Department of Chemistry or the Department of Cooperative Education at 348-2423.

Department Policy

The Department of Chemistry does not award credit for courses by examination; it does, however, award credit for AP Chemistry with a score of 3 or higher and with evidence of a suitable laboratory experience. The department does not award credit for life experience.

Course Descriptions

Note: Laboratories may not be taken prior to the corresponding course. Laboratories must be taken concurrently where noted. Students must register for the laboratory separately.

Definition of Prefixes

CHM-Chemistry; CHS-Chemistry-Specialized; ISC-Interdisciplinary Natural Sciences; OCC-Oceanography-Chemical.

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

CHM 1032 Chemistry and Society(3) CHM 1032L Chemistry and Society Lab (1). A course for non-science majors which introduces students to basic concepts in chemistry and applies those concepts to contemporary issues such as air/water pollution, energy and food production, drugs, nutrition, and toxic chemicals. Prerequisite: One year of high school or college algebra. (Lab fees assessed) (F,S,SS)

CHM 1033 Survey of Chemistry (4). CHM 1033L Survey of Chemistry Lab (1) General and organic chemistry for non-science majors only. Atoms and molecules, states of matter, equilibrium, kinetics, acids and bases and introduction to organic chemistry. Laboratory must be taken concurrently. Does not fulfill requirements for chemistry, biology or pre-med majors. Prerequisites: One year of high school or college algebra. (Lab fees assessed) (F)

CHM 1045 General Chemistry I (4) CHM 1045L General Chemistry Lab I (1). Fundamental principles of general chemistry: states of matter, atomic structure, stoichiometry, chemical bonding, acid-base reactions, gas laws. Concurrent registration in both lecture and laboratory is required. Prerequisite: Second year high school algebra or college algebra.(Lab fees assessed) (F,S,SS)

CHM 1046 General Chemistry II (3) CHM 1046L General Chemistry Lab II (1). Continuation of General Chemistry I (CHM 1045). Fundamental principles of chemistry: thermodynamics, solutions, kinetics, equilibrium and electrochemistry. Concurrent registration in both lecture and laboratory is required. Prerequisites: CHM 1045 (with a "C" or better), CHM 1045L.(Lab fees assessed) (F,S,SS)

CHM 2200 Survey of Organic Chemistry (3) CHM 2200L Survey of Organic Chemistry Lab (1). A basic one-semester survey course in organic chemistry for non-majors presenting a broad background in the reactions and structures of organic molecules. Does not fulfill requirements for chemistry, biology, or pre-med majors. Laboratory must be taken concurrently with the course. Prerequisites: CHM 1032, CHM 1032L, CHM 1033, CHM 1033L, or CHM 1046, CHM 1046L. (Lab fees assessed) (S)

CHM 2210 Organic Chemistry I (4) CHM 2210L Organic Chemistry Lab I (1). An introduction to chemical bonding and atomic structure theory as it pertains to the chemistry of carbon compounds. Correlation between structure and reactivity of organic molecules followed by a systematic look at the various reaction types using reaction mechanisms as a tool for study.

Concurrent registration in both lecture and laboratory is required. Prerequisites: CHM 1046 (with a "C" or better), CHM 1046L. (Lab fees assessed) (F,S,SS)

CHM 2211 Organic Chemistry II (3) CHM 2211L Organic Chemistry Lab II (1). Continuation of CHM 2210, 2210L. Concurrent registration in lecture and laboratory is required. Prerequisites: CHM 2210 (with a "C" or better), 2210L. (Lab fees assessed) (F,S,SS)

CHM 3120 Quantitative Analysis (3) CHM 3120L Quantitative Analysis Lab (2). Fundamentals of classical quantitative analysis. Topics include theory of precipitation, acid-base and oxidation-reduction reactions, as well as an introduction to spectrophotometric methods of analysis, ion-exchange techniques and complex formation. Laboratory must be taken concurrently with the course. Prerequisites: CHM 1046, CHM 1046L. (F,S,SS)

CHM 3400 Fundamentals of Physical Chemistry (3). CHM 3400L Fundamentals of Physical Chemistry Lab (1). Principles of physical chemistry. Topics include thermodynamics, equilibria, electrochemistry, and reaction kinetics. Laboratory must be taken concurrently with the course. Prerequisites: MAC 2311, 2312; PHY 2048, 2048L PHY 2049, 2049L, or PHY 2053, 2048L, and 2054, 2049L, CHM 3120, 3120L. (S)

CHM 3410 Physical Chemistry I (4) CHM 3410L Physical Chemistry Lab I (1). Principles of thermodynamics, gas laws, kinetic theory of gases, chemical equilibrium, electrochemistry, and kinetics. Laboratory to be taken concurrently with the course. Prerequisites: MAC 2311, 2312; PHY 2048, 2048L PHY 2049, PHY 2049L, and CHM 3120, CHM 3120L. (F)

CHM 3411 Physical Chemistry II (4).CHM 3411L Physical Chemistry Lab II (2). C255 Introduction to quantum mechanics. The Schrodinger equation and its application to rotational, vibrational, and electronic spectroscopy, atomic and molecular structure, and bonding. Prerequisites: CHM 3410, 3410L. (S)

CHM 3949, CHM 4949 Cooperative Education in Chemistry (1-3). One semester of fulltime supervised work in an outside laboratory. Limited to students admitted to the University Coop Program. A written report and supervisor evaluation will be required of each student. (F,S)

CHM 4090L Introduction to Scientific Glassblowing (1). Basic glassblowing operations with glass tubing and rod are taught. Emphasis is on making and repair of scientific glassware. No prerequisites.

CHM 4130 Modern Analytical Chemistry (3) CHM 4130L Modern Analytical Chemistry Lab (2). Instrumental methods of chemical analysis, including electroanalytical methods, gas and liquid chromatography, mass spectrometry, x-ray fluorescence, and spectrophotometric methods. Laboratory must be taken concurrently with the lecture. Prerequisites: CHM 3120, 3120L, CHM 2211, 2211L, CHM 3410, PHY 2048, 2048L, PHY 2049, 2049L, or permission of the instructor. (S)

CHM 4220 Advanced Organic Chemistry (3). An intensive examination of the major areas of contemporary organic chemistry. Reactive intermediates, pericyclic reactions, molecular rearrangements, and modern synthetic methods are among the topics covered. Prerequisites: CHM 2211, 2211L. (F,S)

CHM 4230L Structure Determination Lab (1). The qualitative analysis of organic compounds using modern spectroscopic, chromatographic and chemical methods. Prerequisites: CHM 2211, and 2211L. (F,S,SS)

CHM 4300 Bio-Organic Chemistry (3). Chemistry of naturally-occurring organic compounds of biological importance. The relationship between organic chemistry and the chemical reactions which constitute the living organism. Prerequisite: CHM 2211, and 2211L.

CHM 4305 Biological Chemistry (3). Structures and functions of nucleic acids and proteins and cellular processes such as metabolism, replication and transcription are examined from a chemistry perspective. Prerequisites: CHM 2211, CHM 3120, BSC 1011 or permission of the instructor. Corequisite: A semester of physical chemistry.

CHM 4320L Research Techniques in Organic Chemistry (2). Practical instruction in the more advanced manipulations and procedures of the modern chemistry laboratory. Restricted to B.S. chemistry majors. Prerequisites: CHM 3120, CHM 2211, CHM 2211L, CHM 3410, and CHM 3411L.

CHM 4321 Protein Chemistry (3). Structures of proteins and how they are determined. Protein-small molecule, protein-protein, protein-DNA, protein membrane interactions and their functions. Prerequisites: CHM 2211, BSC 1011, a biochemistry course or permission of the instructor. Corequisite: CHM 3410 or permission of the instructor.

CHM 4610 Advanced Inorganic Chemistry (3). Atomic structure, periodicity, bonding and structure of inorganic compounds, solution chemistry, ligand field theory, organometallic chemistry, and specific chemistry of the elements. Prerequisites: CHM 3120, CHM 2211, and CHM 3411. (F)

CHM 4610L Advanced Inorganic Chemistry Lab (1). Synthesis, purification, and study of coordination and organometallic compounds. Prerequisite: CHM 3411. Corequisite: CHM 4610. (F)

CHM 4910L Undergraduate Research in Chemistry (3). The student works directly with a professor on a research project. Credit is assigned based on 4 hr/wk laboratory/library work per credit hour. A written report is required. (F,S,SS)

CHM 4911L Undergraduate Research 2 (1-20). Faculty directed research in chemistry. Credit is assigned based on 4 hr/wk laboratory/library work per credit hour. May be repeated. Prerequisite: CHM 4910L. (F,S,SS)

CHM 4930 Senior Seminar (1). Each student will make an oral presentation to faculty and other students enrolled in the seminar course. The subject of the seminar may be either a report of results of an independent study project or a survey of the recent literature on an assigned topic. (F,S)

CHM 4931 Special Topics (3). Covers selected topics in chemistry. Prerequisite: Permission of the instructor.

CHM 4933 Special Topics (3). Covers selected topics in chemistry. Prerequisite: Permission of the instructor.

CHM 4934 Special Topics (3). Covers selected topics in chemistry. Permission of the instructor.

CHM 5150 Graduate Analytical Methods (3). Analysis of analytical data, electrochemistry, spectro-analytical techniques, chromatography, survey of new analytical methods. Prerequisite: Graduate standing or permission of the instructor. (S)

CHM 5156 Advanced Chromatography (3). Intensive examination of the contemporary practice of chromatography including available chromatographic techniques, their selection and application. Prerequisite: CHM 4130 or permission of the instructor.

CHM 5181 Special Topics in Analytical Chemistry (VAR). An intensive examination of one or more areas selected by instructor and students. Prerequisite: CHM 4130 or permission of the instructor.

CHM 5225 Graduate Organic Chemistry (3). Advanced topics in organic chemistry. Structure of organic molecules, reaction mechanisms, organic synthesis, and natural product chemistry. Prerequisite: Graduate standing or permission of the instructor. (F)

CHM 5236 Spectroscopic Techniques and Structures Elucidation (3). Advanced techniques for the spectroscopic identification of organic compounds. Interpretation of spectral information for determination of structures of various classes of organic compounds. Prerequisites: CHM 4220 and CHM 4230L.

CHM 5250 Organic Synthesis (3). Use of classical and modern reactions in the design and construction of complex organic molecules including natural products. Some topics covered will be construction reactions, refunctionalization, stereochemistry and conformational analysis. Prerequisite: CHM 4220 or permission of the instructor.

CHM 5260 Physical Organic Chemistry (3). A series of topics will be discussed including molecular orbital theory as it pertains to organic molecules, kinetic and thermodynamic approaches to the study of reaction mechanisms, quantitative approaches to conformational analysis, etc. Prerequisite: CHM 4220 and physical chemistry or permission of the instructor.

CHM 5280 Natural Products Chemistry and Biosynthesis (3). Studies of the chemical origins (biosynthesis), properties, and synthesis of the various classes of naturally occurring compounds: terpenes, steroids, alkaloids, acetogenins. Prerequisite: CHM 4220 or permission of the instructor.

CHM 5302 Organic Chemistry of Nucleic Acids (3). Organic chemistry of ribose sugars, nucleoside heterocyclic bases, mechanism-based inhibitors of enzymes involve in nucleic acid metabolism, and chemical synthesis of DNA. Prerequisite: CHM 4220 or permission of the instructor.

CHM 5306 Special Topics in Biological Chemistry (3). Investigation of one or more areas of biologically related chemistry. Prerequisites: CHM 4305 or permission of the instructor.

CHM 5351 Computer Modeling of Biological Molecules (3). Introduces use of computers in studying biological macromolecules. Simulations, visualization methods, software, databases. Prerequisite:CHM 3411, Biochemistry recommended.

CHM 5380 Special Topics in Organic Chemistry (VAR). An intensive examination of one or more areas selected by instructor and students. Prerequisite: CHM 4220 and physical chemistry or permission of the instructor.

CHM 5423 Atmospheric Chemistry (3). Chemical processes in atmospheres. Photochemistry, chemical kinetics, tropospheric and stratospheric chemical reactions, anthropogenic effects on the earth's atmosphere and chemistry of planetary atmospheres. Prerequisite: CHM 3410, CHM 3411, or permission of the instructor.

CHM 5425 Graduate Physical Chemistry (4). Prequantum physics, the Schrodinger equation and its solutions, atoms and molecules, rotational, vibrational, and electronic spectroscopy. Prerequisite: Graduate standing or permission of the instructor.

CHM 5440 Kinetics and Catalysis (3). Theory of elementary reactions, activated complex theory, mechanisms of complex reactions. Prerequisites: CHM 3411, MAP 2302.

CHM 5490 Physical Spectroscopy (3). Introduction to atomic and molecular quantum states, selection rules, and fundamental principles of spectroscopy. Introduction to group theory and to the theory of UV/visible, infrared, Raman, microwave, nmr, photoelectron, and mass spectroscopies, and the applications of these methods to the determination of fundamental physical properties and the structure of organic and inorganic molecules. Prerequisite: Physical Chemistry.

CHM 5490L Physical Spectroscopy Lab (1). The theory of spectroscopy and the use of modern instrumentation to investigate molecular structure. Prerequisites: CHM 2211, 2211L. Corequisite: PHY 4604 or CHM 5490.

CHM 5503 Physical Chemistry of Nucleic Acids (3). Physical chemistry of nucleic acids including spectroscopic determination of structures of DNAs, RNAs, and DNA-protein complexes anf thermodynamic and kinetic studies of nucleic acid-ligand complexes and nucleic acid structures. Prerequisite: CHM 4305 or permission of the instructor.

CHM 5506 Physical Biochemistry (3). Physical properties of biomolecules, molecular conformation; thermodynamic, kinetic, and spectroscopic properties of biomolecules. Prerequisites: CHM 4305 or permission of the instructor.

CHM 5517 Solid State (3). Crystalline form of solids, lattice dynamics, metals, insulators, semiconductors, and dielectric materials. Prerequisite: CHM 5490 or PHY 4604.

CHM 5581 Special Topics in Physical Chemistry (VAR). An intensive examination of one or more areas selected by instructor and students. Prerequisite: CHM 3411 or permission of the instructor.

CHM 5650 Physical Inorganic Chemistry (3). Introduction to use of physical methods to determine the structure of inorganic compounds. Prerequisite: CHM 4610 or permission of the instructor.

CHM 5681 Special Topics in Inorganic Chemistry (VAR). An intensive examination of one or more areas selected by instructor and students. Prerequisite: CHM 4610 or permission of the instructor.

CHM 5765 Aquatic Chemistry (3). Redox chemistry, chemistry of sediments, organic biogeochemistry, chemodynamics, and fates or organic pollutants in aqueous environments. Prerequisites: CHM 2211, CHM 4130, or permission of the instructor.

CHM 5931 Special Topics (3). A course covering selected special topics in chemistry.

CHM 5936 Special Topics in Environmental Chemistry (3). An intensive examination of one or more areas selected by the instructor and students. Prerequisite: Permission of the instructor

CHS 4100 Radiochemistry (2) CHS 4100L Radiochemical Techniques Lab (2). Production, isolation, methods of detection, counting statistics and estimation of radioisotopes. Applications to chemical, physical and biological problems. Laboratory must be taken concurrently with the course. Prerequisites: CHM 1045, 1046, 3120, 3120L; MAC 3411, 3412.

CHS 4503 Forensic Science (3). Modern instrumental methods of chemical analysis and their use in the administration of justice. Prerequisites: CHM 3120 and CHM 2211 or permission of the instructor. Corequisite: a semester of physical chemistry or permission of the instructor.

CHS 4503L Forensic Science Lab (1). Laboratory to accompany Forensic Science, CHS 4503. Prerequisite: CHM 3120, CHM 3120L, CHM 2211, CHM 2211L or permission of the instructor.

CHS 4591 Forensic Science Internship (3). Internship in a forensic-type laboratory, contributing in a specific manner on an assigned problem. Twenty hrs/wk. Written report re-quired. Open only to students in the Criminalistics Chemistry Program. Prerequisite: Senior standing.

CHS 5531 Forensic Analysis (3). An introduction to established chemical analysis techniques used in forensic science and new techniques under development. Prerequisite: CHM 3120, CHM 3120L, CHM 2211, CHM 2211L or permission of the instructor.

CHS 5531L Forensic Analysis Lab (1). Laboratory to accompany Forensic Analysis CHS 5531. Prerequisite: CHM 3120, CHM 3120L, CHM 2211, CHM 2211L or permission of the instructor.

ISC 4041 Scientific Literature (1). This course presents a perspective on the scientific literature and scientific documentation. Problems in using and searching the scientific literature will be specifically designed to meet the needs of various disciplines, e.g. chemistry, environmental science, physics, biology. Prerequisites: 16 semester hours of science.

School of Computer Science

Samuel Shapiro, *Professor and Acting Director*
Bill Kraynek, *Associate Professor and Associate Director*
Walid Akache, *Instructor*
Paul C. Attie, *Assistant Professor*
David Barton, *Professor*
Toby S. Berk, *Professor*
Shu-Ching-Chen, *Assistant Professor*
Yi Deng, *Associate Professor*
Timothy Downey, *Instructor*
Raimund Ege, *Associate Professor and Graduate Director*
Michael Evangelist, *Professor*
Mbola Fanomezantsoa, *Instructor*
William Field, *Visitng Instructor*
Xudong He, *Assistant Professor*
Dawn J. Holmes, *Lecturer*
Faisal Kaleem, *Visiting Instructor*
Masoud Milani, *Associate Professor*
Jainendra K. Navlakha, *Professor*
Ana Pasztor, *Professor*
Alexander Pelin, *Associate Professor*
Norman Pestaina, *Instructor*
N. Prabhakaran, *Associate Professor*
Naphtali Rishe, *Professor*
Gregory Shaw, *Instructor*
Geoffrey Smith, *Assistant Professor*
Joslyn Smith, *Instructor*
Wei Sun, *Associate Professor*
Mark A. Weiss, *Professor*

The Bachelor of Science program in Computer Science is accredited by the Computer Science Accreditation Commission (CSAC) of the Computer Science Accreditation Board (CSAB), a specialized accrediting body recognized by the Council on Postsecondary Accreditation (COPA) and the U.S. Department of Education

The School of Computer Science offers both undergraduate and graduate degree programs. The major program and a minor program, are described below.

Bachelor of Science

Degree Program Hours: 120

Lower Division Preparation

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

As part of the 60 semester hours of lower division course work necessary to enter this upper division major, note the following recommendations or course requirements, or both.

Required Courses

Common Prerequisites

COP 2210	Introduction to Programming	
	or	
COP 2423	C for Engineers	
MAC 2311	Calculus I	
MAC 2312	Calculus II	
PHY 2048	Physics with Calculus I	
PHY 2048L	Physics with Calculus I Lab	
PHY 2049	Physics with Calculus II	
PHY 2049L	Physics with Calculus Lab II	
	or	
PHY 2053	Physics without Calculus I	
PHY 2053L	Physics without Calculus Lab I	
PHY 2054	Physics without Calculus II	
PHY 2054L	Physics without Calculus Lab II	

Two additional one-semester courses in natural science; each of these should be a course designed for science or engineering majors.

Courses Required for the Degree:

MAD 2104	Discrete Mathematics	

Third and Fourth Years

ENC 3211	Report and Technical Writing	3
COT 3420	Logic for Computer Science	3
MAD 3512	Introduction to Theory of Algorithms	3
STA 3033	Introduction to Probability and Statistics for CS	3
COP 3337	Intermediate Programming	3
COP 3338	Advanced Programming	3
COP 3402	Fundamentals of Computer Systems	3
COP 3530	Data Structures	3
COP 4540	Database Management	3
CDA 4101	Structured Computer Organization	3
CEN 4010	Introduction to Software Engineering	4
COP 4610	Operating Systems Principles	3

In addition, majors must complete three courses from the following list. At least one course must be a starred (*) course:

COP 5621	Compiler Construction	3
COP 4225	Advanced Unix Programming	3
COP 4226	Advanced Windows Programming	3
CEN 4500	Data Communications	3
COP 4555	Survey of Programming Languages	3
CDA 4400	Computer Hardware Analysis	3
CAP 3710	Computer Graphics	3
COT 5420	Theory of Computation I*	3
MAD 3401	Numerical Analysis*	3
MAD 3305	Graph Theory*	3
MAD 4203	Introduction to Combinatorics*	3
MHF 4302	Mathematical Logic*	3

Science Requirement

I. A two-semester sequence in physics for science majors. The following sequences (with accompanying laboratory courses) will satisfy the requirement.

Physics with Calculus I and II with Labs

or

Physics I and II with Labs

or

General Physics I and II with Labs

or

Physics without Calculus I and II with Labs

II. Two additional one-semester courses in natural science. Each of these should be a course designed for science or engineering majors.

A list of additional approved courses is available through the School of Computer Science.

At least 28 of the 46 upper division credits must be taken at the University.

Remarks: The following courses are not acceptable for credit toward graduation, unless a student has passed the course before declaring a Computer Science major: CGS 2060, CGS 3300, CGS 2100, COP 2172, MAC 2233, STA 1013, STA 3122-23, STA 2023, QMB 3150, ESI 3161.

Minor in Computer Science

Required Courses

COP 2210	Introduction to Programming	3
	or	
CGS 2423	C for Engineers	3
COP 3402	Fundamentals of Computer Systems	3
COP 3337	Intermediate Programming	3

Plus two from the following list: CGS 3403, COP 3338, COP 3530, COP 4555, CDA 4101, CDA 4400, CEN 4500, CAP 3710, and MAD 3401. Normally the students from Engineering would choose COP 3338, and either COP 3530 or CDA 4101 and students from the School of Business would choose CGS 3403 and one

other. If one of the other options are selected, then the student should verify that he or she has the additional prerequisites necessary for the chosen course. At least nine of the 15 credits must be taken at FIU.

Course Description

Definition of Prefixes

CAP-Computer Applications; CDA-Computer Design/Architecture; CIS-Computer Information Systems; CGS-Computer General Studies; COC-Computer Concepts; COP-Computer Programming; COT-Computing Theory.

CAP 4710 Principles of Computer Graphics (3). A first course in algorithms/techniques for image generation devices, geo-metric transformations/matrics, algor-ithms for hidden surfaces, ray tracing, advanced rendering. Programming with standard graphics interface. Prereq-uisites: COP and MAP 2312.

CAP 5602 Introduction to Artificial Intelligence (3). Presents the basic concepts of AI and their applications to game playing, problem solving, automated reasoning, natural language processing and expert systems. Prerequisite: COP 3530.

CAP 5701 Advanced Computer Graphics (3). Advanced topics in computer graphics: system architecture, interactive techniques, image synthesis, current research areas. Prerequisites: COP 3530 and CAP 3710 or equivalent, or by permission.

CDA 4101 Structured Computer Organization (3). Covers the levels of organization in a computer: Design of memory, buses, ALU, CPU; design of microprogram. Covers virtual memory, I/O, multiple processes, CISC, RISC and parallel architectures. Prerequisites: MAD 2104, COP 3402 and COP 3337.

CDA 4400 Computer Hardware Analysis (3). The study of hardware functions of a basic computer. Topics include logic elements, arithmetic logic units, control units, memory devices, organization and I/O devices. Prerequisites: CDA 4101.

CDA 5312 Micro Processing for Software Designers (3). Design of application software for OEM products. Topics include: 16-bit microprocessor architecture and assembly language, HLLs for design of microprocessor software, software for multiprocessing and multiprocessor systems. Prerequisite: Permission of the instructor.

CEN 4010 Introduction to Software Engineering (4). Covers technical, managerial and social/ethical aspects of software development process. Tools and techniques for the entire software life-cycle are discussed. A project and a presentation are required. Prerequisite: COP 3530.

CEN 4500 Data Communications (3). Study Computer network models and protocol layers. Topics include: error handling, frames, broadcast networks, channel allocation; network routing algorithms, internetworking, TCP/IP, ATM protocols. Prerequisite: CDA 4101.

CEN 5011 Software Engineering (3). This course deals with the design of large scale computer programs. Included are topics dealing with planning design, implementation, validation, metrics, and the management of such software projects. Prerequisite: CEN 4010.

CEN 5686 Expert Systems (3). Introduction to expert systems, knowledge representation techniques and construction of expert systems. A project such as the implementation of an expert system in a high level AI-language is required. Prerequisite: COP 3530 or permission of the instructor.

CGS 1500 Word Processing with Wordperfect (1). This course is to teach how to use Wordperfect effectively. The student will be expected to become competent Wordperfect user. Not acceptable for credit for Computer Science majors.

CGS 1510 Electronic Spreadsheets (1). The fundamentals of electronic spreadsheets using a modern software package on a microcomputer. Not acceptable for credit for Computer Science majors.

CGS 1540 Microcomputer Databases (1). The fundamentals of micro-computer Database management system using a modern software package on a microcomputer. Not acceptable for credit for Computer Science majors.

CGS 1580 Desktop Publishing (1). The fundamentals of desktop Publishing and Presentation graphics using a modern software package on a microcomputer. Not acceptable for credit for Computer Science majors.

CGS 2100 Intro to Microcomputer Applications for Business (3). A hands-on study of spreadsheet and database management package for business students without a technical background. Not acceptable for credit for Computer Science majors.

CGS 2060 Introduction to Micro-computers (3). A hands-on study of microcomputer software packages for applications such as operating system, word processing, spreadsheets, and database manage-ment. For students without a technical background. Not acceptable for credit for Computer Science majors.

CGS 2420 FORTRAN for Engineers (3). A first course in programming that describes the syntax and semantics of the FORTRAN 77 programming language. The development of algorithms will be discussed together with fundamentals of program testing and debugging. Emphasizes those aspects of the language required by students of engineering and natural sciences. Not acceptable for credit for Computer Science majors.

CGS 2423 C for Engineers (3). A first course in programming geared for engineering and natural science students that describes the syntax and semantics of ANSI C programming language. Includes developing algorithms and writing for problems in engineering and science.

CGS 2570 Advanced Microcomputer Applications (3). Microcomputer systems and technology. Topics include popular hardware, operating systems, application software, system development and maintenance. Prerequisites: CGS 2060 or COP 2210.

CGS 3403 COBOL for Non-Computer Science Majors (3). Introduction to COBOL and historical background. Flow-charting and program design. This course is not for Computer Science majors.

CGS 3559 Using the Internet (1). Internet history and importance. What is available on the Net. Tools such as email, listserves, telnet, ftp, Archie, Veronica, Gopher, netfind, the World Wide Web, Wais, and Mosaic. Nontechnical. Prerequisite: CGS 2060 or equivalent.

CIS 3900 Independent Study (VAR). Individual conferences, assigned readings, and reports on independent investigations.

CIS 3930 Special Topics (VAR). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

CIS 4905 Independent Study (VAR). Individual conferences, assigned readings, and reports on independent investigations.

CIS 4930 Special Topics (VAR). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

CIS 5900 Independent Study (1-10). Individual conferences, assigned readings, and reports on independent investigations.

CIS 5910 Project Research (1-6). Advanced undergraduate or master's level research for particular projects. Repeatable. Prerequisite: Permission of Department.

CIS 5931 Special Topics (VAR). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

COP 2172 Programming in BASIC (3). Introduction to Visual BASIC computer language with emphasis on business data processing applications. Not acceptable for credit for Computer Science majors.

COP 2210 Introduction to Programming (3). A first course in computer science that uses a structured programming language to study programming and problem solving on the computer. Includes the design, construction and analysis of programs.

COP 3175 Programming in Visual Basic (3). An introduction to Visual Basic programming with emphasis on Business Applications. Prerequisite: CGS 2100 or CGS 2060.

COP 3337 Intermediate Programming (3). A study of the C++ programming language including streams, classes, recursion, template classes and exceptions. An introduction to data structures is included. Prerequisites: Course in programming, ex: Pascal, C, Ada or C++.

COP 3338 Advanced Programming (3). Advanced programming concepts including object-oriented programming. Topics include inheritance and polymorphism in an object-oriented language such as Java. Prerequsite: COP 3337.

COP 3402 Fundamentals of Computer Systems (3). Overview of computer systems organization. Data representation. Machine and assembly language programming. Prerequisites: COP 2210 or equivalent.

COP 3530 Data Structures (3). Basic concepts of data organization, running time of a program, abstract types, data structures including linked lists, n-ary trees, sets and graphs, internal sorting. Prerequisites: MAD 2104 and COP 3338.

COP 3832 Advanced Web Server Communication (3). Maintain a web server on the Internet. Learn HTML, PERL, Javascript. Configure the Apache web server. Write interactive server scripts. Discuss Web security & ASP. Use Java applets and ActiveX controls. Prerequisite: CGS 3559, COP 2210 or equivalents.

COP 3949 Cooperative Education in Computer Science (1-3). One semester of full-time work, or equivalent, in an outside organization, limited to students admitted to the CO-OP program. A written report and super-visor evaluation is required of each student. Prerequisites: Calculus II and COP 3337.

COP 4225 Advanced Unix Programming (3). Unix overview: files and directories, shell programming. Unix tools: sed, grep, and others. Unix internals: file systems, process structure. Using the system call interface. Interprocess communication. Prerequisite: COP 3338. Corequisite: COP 4610.

COP 4226 Advanced Windows Programming (3). Advanced Windows Programming topics including Object Linking and Embedding (OLE), Open Database Connectivity (ODBC), Memory Management Techniques, Dynamic Link Libraries, Multireaded Programming and Client/Server Applications. Prerequisite: COP 3338.

COP 4540 Database Management (3). Logical aspects of databases. Topics include: Semantic Binary, Relational Network and hierarchical models; E-R Model; Database design; SQL; Physical Database Organization; Deductive Databases; Fourth-Generational Language. Prerequisite: COP 3338.

COP 4555 Principles of Programming Languages (3). A comparative study of several programming languages and para-digms. Emphasis is given to design, evaluation and implementation. Pro-grams are written in a few of the languages. Prerequisite: COP 3337.

COP 4610 Operating Systems Principles (3). Operating systems design principles and implementation techniques. Address spaces, system call interface, process/threads, interprocess communication, deadlock, scheduling, memory, virtual memory, I/O, file systems. Prerequisites: CDA 4101 and COP 3338.

COP 4949 Cooperative Education in Computer Science (1-3). One semester of full-time work, or equivalent, in an outside organization, limited to students admitted to the CO-OP program. A written report and supervisor evaluation is required of each student. Prerequisites: MAP 2312, STA 3033 and COP 3337.

COP 5621 Compiler Construction (3). Basic techniques of compilation; scanning; grammars and LL and LR parsing, code generation; symbol table management; optimization. Prereq-uisites: MAD 3512 and CEN 4010.

COT 3420 Logic for Computer Science (3). An introduction to the logical concepts and computational aspects of propositional and predicate logic, as well as to concepts and techniques underlying logic programming, in particular, the computer language Prolog. Prerequisites: COP 3337, and MAD 2104.

COT 5420 Theory of Computation I (3). Abstract models of computation; including finite automata, regular expressions, context-free grammars, pushdown automata, Turing machines. Decidability and indecidability of computational problems Prerequisite: MAD 3512.

Economics

Panagis Liossatos, *Professor and Chairperson*
Nejat M. Anbarci, *Associate Professor*
Harvey Averch, *Professor, Courtesy Appointment, College of Public and Urban Affairs*
Mahadev Bhat, *Assistant Professor (joint appointment with Environmental Studies)*
John H. Boyd III, *Associate Professor*
Manuel J. Carvajal, *Professor*
Irma de Alonso, *Professor*
Alan Gummerson, *Lecturer*
Antonio Jorge, *Professor of Political Economy, (joint appointment with International Realtions)*
Ali Cem Karayalcin, *Associate Professor*
Robert J. Lemke, *Assistant Professor*
J. Kenneth Lipner, *Associate Professor*
Devashish Mitra, *Assistant Professor*
Santanu Roy, *Associate Professor*
Jorge Salazar-Carrillo, *Professor and Director, Center for Economic Research and Education*
Constantinos Syropoulos, *Associate Professor*
Dimitrios Thomakos, *Assistant Professor*
Tao Wang, *Assistant Professor*
Mira Wilkins, *Professor*
Maria Willumsen, *Associate Professor*
Ann Witte, *Professor*

The major in economics provides the student with an understanding of economic problems and institutions, and with analytical tools to apply this knowledge to contemporary problems. The program is designed for the student desiring a career in business, government, international agencies, or multinational corporations; and for those planning graduate study in economics, business, law, public administration, urban studies, or international relations.

Bachelor of Arts

Degree Program Hours: 120

Lower Division Preparation

Required Courses

Common Prerequisites

ECO 2013	Principles of Macroeconomics	
ECO 2023	Principles of Microeconomics	

Courses required for the degree:

MAC 2311	Calculus I	
	or	
MAC 2233	Calculus for Business	
STA 2122	Introduction to Statistics I	
	or	
STA 2023	Statistics for Business and Economics	

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program: (60)

Required Courses for the Major (18)

ECO 3101	Intermediate Microeconomics	3
ECO 3203	Intermediate Macroeconomics	3
ECO 3303	Development of Economic Thought	3
ECO 4410	Measurement and Analysis of Econ Activity	3
ECO 4421	Introduction to Econometrics	3
ECO 4932	Topics in Theory[1]	3

Elective Courses for the Major (15)
Five additional economics courses, of which at least two must be from the following list of courses which re-quire an immediate theory course as a prerequisite: ECO 4224, ECO 4401, ECO 4504, ECO 4703, ECO 4713, ECP 4031, ECP 4203, ECP 4204, ECP 4314, ECP 4403[2]

Electives (27)

[1]This requirement can also be met by taking ECO 4933.
[2]The following courses **cannot** be used as Elective Courses for the Major: ECO 2013, ECO 2023, ECO 3040, ECO 3431, ECO 3949, ECO 4906, ECO 4949.

Minor in Economics: (18)

Required Courses for the Minor(12)

ECO 2013	Principles of Macroeconomics	3
ECO 2023	Principles of Microeconomics	3
ECO 3101	Intermediate Microeconomics	3
ECO 3203	Intermediate Macroeconomics	3

Elective Courses for the Minor (6)
Two Additional economics courses[1] 6
[1]The following courses **cannot** be used as Elective Courses for the Minor: ECO 3040, ECO 3431, ECO 3949, ECO 4906, ECO 4949.

Course Descriptions

Definition of Prefixes

ECO-Economics; ECP-Economic Problems and Policy; ECS-Economic Systems and Development.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

ECO 2013 Principles of Macroeconomics (3). Introduction to economic analysis of the overall economy: national income accounting, unemployment, inflation, monetary and fiscal policies, budget deficits and debt, long-run growth. (F,S,SS)

ECO 2023 Principles of Microeconomics (3). Introduction to economic analysis of individual units—households and firms. Operation of markets; supply and demand analysis. (F,S,SS)

ECO 3040 Consumer Economics (3). Consumer behavior; advertising and other influences affecting demand. Patterns of consumer expenditure; effects of public policy on family incomes and consumption patterns. The consumer protection movement. Does not count as economics elective toward economics major. (F,S,SS)

ECO 3101 Intermediate Microeconomics (3). Analysis of markets, theory of firm, demand and production theories, general equilibrium, and welfare economics. Prerequisites: ECO 2023 or ECO 3021. (F,S)

ECO 3203 Intermediate Macroeconomics (3). Analysis of the aggregate economy in the long-run (full employment, economic growth, productivity) and the short-run (unemployment, business cycles); economic policy for short-run stability and long-run growth (monetary and fiscal policies, budget deficit, inflation, and debt); balance of payments and exchange rate. Prerequisites: ECO 2013 or ECO 3011. (F,S)

ECO 3223 Money and Banking (3). Elements of monetary theory; relationships between money, prices, production, and employment; factors determining money supply; history and principles of banking, with special references to the United States. Prerequisites: ECO 2013 or ECO 3011. (F)

ECO 3303 Development of Economic Thought (3). Evolution of economic theory and doctrine. Contributions to economic thought from ancient times to J. M. Keynes. Emphasis on institutional forces shaping the continuum of economic thinking. (S)

ECO 3410 Measurement and Analysis of Economic Activity (3). Covers statistical methods as applied in economics. Topics include estimation and hypothesis testing, analysis of variance, and single and multiple regression models. Prerequisites: STA 2023 or equivalent. (F,S)

ECO 3431 Applied Macroeconomics (3). Aggregate economic performance and business conditions analysis, nature and causes of economic expansions and recessions, inflation, balance of trade, balance of payments, and exchange rate problems, fiscal and monetary policies, short-run instability and long-run growth. Cannot be taken for credit concurrently with, or after taking ECO 3203. Prerequisites: ECO 2013 or ECO 3011. (F,S,SS)

ECO 3704 International Economics (3). Explorations of why nations trade, effects of trade on distribution, commercial policy, balance of payments adjustment; exchange rate determination, Eurocurrency markets, and international institutions. Prerequisites: ECO 2013 and ECO 2023.

ECO 3933 Special Topics (3). A course designed to give students a particular topic or a limited number of topics not otherwise offered in the curriculum.

ECO 3949 Cooperative Education in Economics (1-3). A student majoring in Economics may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Does not count as economics elective toward economics major.

ECO 4224 Issues in Money and Banking (3). Current controversies in the conduct of monetary policy; innovations in financial markets and instruments, and their impact on the targets and long-run goals of central banks. Prerequisite: ECO 3203 or ECO 3431.

ECO 4321 Radical Political Economy (3). The relationship between Marxist and orthodox economists. Attention given to the New Left and other current criticisms of capitalist economies. Multinational corporate policy, concentration of economic power, income distribution, and Third World development.

ECO 4401 Introduction to Mathematical Economics (3). Mathematical formulation of economic theory. Mathematical treatment of maximizing and optimizing behavior; applications to consumer and business firm theory, value, economic strategies, growth and stability. Emphasis on understanding of analytical techniques Prerequisites: ECO 3101 or ECO 3203 (preferably both), and Calculus. (F,S)

ECO 4421 Introduction to Econometrics (3). Application of statistics and economic theory to formulating, estimating, and drawing inferences about relationships among economic variables. Coverage includes linear regression model, heteroscedasticity, serial correlation, multicollinearity, and simultaneous equations. Prerequisites: ECO 3101, ECO 3203, ECO 4410, or permission of the instructor. (F,S)

ECO 4504 Introduction to Public Finance (3). Describes the way resources are allocated in a market economy and cases where markets fail. Analyzes government expenditure policy, principles of taxation, and the various taxes in use today. Prerequisite: ECO 3101. (S)

ECO 4622 Economic History of the United States (3). The growth of the American economy from colonial times to the present. Special emphasis on market forces, institutional arrangements, and policies contributing to this expansion. (F)

ECO 4623 American Business History (3). The growth of American business from 1880 to present; integration, diversification, and foreign expansion. Business strategies and managerial structures.

ECO 4701 World Economy (3). A broad overview of the international economy in historical perspective. Topics: economic demography, trade flows, capital movements, diffusion of technology, the emergence of transnational institutions. The student obtains a conception of how economic interdependence has developed.

ECO 4703 International Trade Theory and Policy (3). Causes and consequences of international trade; effects of tariffs and quotas; strategic trade and industrial policies; political economy of protectionism; international economic integration; factor movements; and multinational firms. Prerequisite: ECO 3101. (F)

ECO 4713 International Macroeconomics (3). Analysis of output, inflation, business cycles and economic policy in open economy settings; exchange rate regimes (fixed versus flexible exchange rate); fiscal, monetary, and exchange rate policies. Prerequisite: ECO 3203. (S)

ECO 4733 Multinational Corporation (3). Growth and development of multinational enterprise. Theories of direct foreign investment. Impact on the United States and other developed and less developed nations. Policy implications relating to employment, economic growth, balance of payments, taxation, and national defense. National sovereignty and the multinational corporation.

ECO 4906 Undergraduate Tutorial (1-6). Supervised readings, individual tutorial, and preparation of reports. Requires consent of faculty supervisor and Department Chairperson. Does not count as economics elective toward economics major.

ECO 4932, 4933 Topics in Theory (3,3). Study of a particular topic or a selected number of topics in economics theory not otherwise offered in the curriculum. Prerequisites: ECO 3101, ECO 3203, MAC 2311 or permission of the instructor. (F,S)

ECO 4934 Special Topics (3). A course designed to give students a particular topic or a limited number of topics not otherwise offered in the curriculum. May be repeated for credit with permission of Department. Prerequisite: Permission of the instructor.

ECO 4949 Cooperative Education in Economics (1-3). A student majoring in economics may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Does not count as economics elective toward economics major.

ECO 5709 The World Economy (3). Designed to give an overview of the crucial issues in the world economy. The course covers trade, capital, labor, and technology flows; transnational economic organizations; current economic crisis; global economic interdependence; and the nature and characteristics of international economic order. Required for MIB Program. (S)

ECO 5735 Multinational Corporations (3). Economic theory and multinational corporations. Economic effects. Consequences of nationalization. Spread of the multinational form. State-owned multinational corporations. Prerequisite: Permission of the instructor for undergraduates. (S)

ECO 5906 Advanced Individual Study (1-6). Supervised readings, individual tutorial, and preparation of report. Requires consent of faculty supervisor and Department Chairperson. Open to seniors and graduate students.

ECO 5945 Internship (3). Directed individual study which assists the student in using economic analysis in his employment. Prerequisite: Permission of the chair.

ECP 3123 Economics of Poverty (3). Poverty in the United States: its measurement and history. Theory of personal income distribution. Present and proposed policies to alleviate poverty.

ECP 3143 Economics of Racism (3). Analysis and examination of the economic costs of racism to the individual and society. A perspective from mercantilism to the post industrial contemporary world; international racial aspects of development, income distribution and wealth.

ECP 3203 Introduction to Labor Economics (3). Basic introduction to supply and demand for labor. Discusses labor markets in both historical and institutional context emphasizing why certain patterns have occurred and contemporary institutions developed. Prerequisite: ECO 2023.

ECP 3302 Introduction to Environmental Economics (3). Economic principles applied to environmental problems. Relationship of market and non-market forces to environmental quality. Development of tools for policy analysis. Prerequisites: ECO 2023 or ECO 3021, or permission of the instructor. (F,S,SS)

ECP 3410 Introduction to Public Economics (3). An introduction to the applied economics of the public sector and the microeconomics of public policy making and administration.

ECP 3451 Law and Economics (3). The relationship of economic principles to law and the use of economic analysis to the study of legal problems. Topics include: property rights and contracts, and economic analysis of legal decision making. Prerequisites: ECO 2013 and ECO 2023 or equivalents.

ECP 3533 Health Systems Economics (3). Identification of health systems issues and basic instruments of health systems analysis including the market mechanism, insurance and cost-benefit analysis.

ECP 3613 Introduction to Urban Economics (3). Study of urban areas, their characteristics and economic functions. Topics include location decisions of firms and households, economies of agglomeration, transportation, land use, zoning, urban growth and development policies, urban dimensions of economic and social problems, and the public sector in urban areas. (F)

ECP 4004 Seminar on Current Economic Topics (3). Faculty and student discussion of contemporary economic and social issues.

ECP 4031 Cost-Benefit Analysis (3). Covers cost-benefit analysis, cost-effectiveness analysis, benefit-risk analysis, risk-risk analysis, and systems analysis as applied in the government sector for public investment decisions. Prerequisites: ECO 3101 or equivalent.

ECP 4204 Theory of Labor Economics (3). Neo-classical theory of labor demand and labor supply, human capital theory and critiques. Current programs of human resource development and income maintenance are discussed. Prerequisite: ECO 3101.

ECP 4314 Natural Resource Economics (3). Natural resources and the economy; economics of renewable and nonrenewable resource harvesting and management; public policy options for influencing resource consumption and their environmental implications. Prerequisites: ECP 3202 and ECO 3101, or permission of the instructor.

ECP 4403 Industrial Organization (3). Theory of the firm, market structure; business strategies and conduct. Topics include information and advertising, product durability, technical change, antitrust and trade policies, and regulation. Prerequisites: ECO 3101.

ECS 3003 Comparative Economic Systems (3). Analysis of alternative economic systems. Emphasis on the contrast between market-oriented capitalist economies and Soviet-style planned economies, and on the process of transition from planned to market-oriented systems. Prerequisites: ENC 1101 and ENC 1102.

ECS 3013 Introduction to Economic Development (3). Structural and institutional determinants of economic development; economic analysis and policy formation. Topics include theories of economic development, economic growth, income distribution, rural-urban migration, industry and agriculture, unemployment, education, international trade, economic reform, and the environment. Prerequisites: ECO 2013 and ECO 2023. (F,S)

ECS 3021 Women, Culture, and Economic Development (3). Analysis of problems facing women in developing countries, focusing on gender and cultural issues and their relationships to economic development. Prerequisite: ECO 2013 and ECO 2023 or permission of the instructor.

ECS 3401 The Brazilian Economy (3). Examines the evolution of Brazilian economy, focusing on the process of its industrialization in the 20th century, the policies to achieve it, its impact on the socioeconomic environment and the adjustments of institutions to the structural changes in the economy. Prerequisite: ECO 2013 and ECO 2023.

ECS 3402 The Political Economy of South America (3). An introduction to the political economy of the South American countries, with emphasis on the opening of the region's economies, privatization and deregulation, debt crisis, foreign investment, poverty, income distribution, human resources, and regional trade agreements. Prerequisites: ECO 2013 and ECO 2023. (F)

ECS 3403 Economics of Latin America (3). Study of current economic issues facing Latin American countries, including population growth, poverty, inequality, inflation, trade and balance of payment problems, economic reform, and regional integration. Prerequisites: ECO 2013 and ECO 2023. (S)

ECS 3404 Economic Integration/Latin America (3). Analysis of the methods, meaning and implications of economics in Latin America. Designed to enable the student to appreciate the trend toward regionalism and economic cooperation.

ECS 3430 The Economic Development of Cuba/Past and Present (3). Survey of the Cuban economy under capitalist and Marxist ideologies. Emphasis on the transition stage and on current policies of economic and social change. (F)

ECS 3431 Economics of the Caribbean Basin (3). Survey of the economic systems of the major countries of the Caribbean. Special attention devoted to current problems of economic growth and social transformation. Prerequisite: ECO 2013.

ECS 3432 Economic Integration/Caribbean (3). Analysis of the methods, meaning, and implications of economic integration in the Caribbean. Designed to enable the student to appreciate the trend toward regionalism and economic cooperation.

ECS 5005 Comparative Economic Systems (3). A critical evaluation of the design, goals, and achievements of economic policies in capitalist and socialist economies. Prerequisite: Permission of the instructor for undergraduates.

ECS 5025 Economic Planning (3). Analysis of planning methods in capitalist and socialist economies. Evaluation of macro and micro economic planning tools (input-output) and programming techniques. Theory and practice of economic development planning of agriculture, industrialization, foreign trade, and manpower. Prerequisite: Graduate standing or permission of the instructor.

English

Donald Watson, *Professor and Chairperson*
Harry T. Antrim, *Professor*
St. George Tucker Arnold, *Associate Professor*
Joan L. Baker, *Associate Professor*
Lynne Barrett, *Associate Professor*
Lynn M. Berk, *Professor and Director of the Linguistics Program*
Lisa Blansett, *Assistant Professor*
Greg Bowe, *Assistant Professor and Director of Undergraduate Writing*
Gisela Casines, *Associate Professor and Associate Dean*
Maneck Daruwala, *Associate Professor*
Carole Boyce Davies, *Professor and Director of African-New World Studies Certificate Program*
John Dufresne, *Professor*
Charles Elkins, *Professor*
Mary Jane Elkins, *Associate Professor and Head Advisor*
Peggy Endel, *Associate Professor*
Mary Free, *Associate Professor and Associate Chairperson*
James Hall, *Professor*
Peter Hargitai, *Instructor*
Bruce Harvey, *Assistant Professor*
Marilyn Hoder-Salmon, *Associate Professor and Director of Women's Studies Center*
Tometro Hopkins, *Associate Professor*
Kenneth Johnson, *Associate Professor*
Jeffrey Knapp, *Instructor*
Alfred Lopez, *Assistant Professor*
Kathleen McCormack, *Associate Professor*
Campbell McGrath, *Associate Professor*
Kathryn McKinley, *Assistant Professor*
Carmela Pinto McIntire, *Associate Professor*
Phil Marcus, *Professor and Director of the Master of Arts in English Program*
Asher Z. Milbauer, *Associate Professor*
Robert Ratner, *Instructor*
Meri-Jane Rochelson, *Associate Professor*
Richard Schwartz, *Professor*
Ronn Silverstein, *Instructor*
Ellen Sprechman, *Lecturer*
Lester Standiford, *Professor and Director of Creative Writing Program*
Linda Strong-Leek, *Assistant Professor*
Richard Sugg, *Professor*
James Sutton, *Assistant Professor*
Dan Wakefield, *Writer in Residence*
Butler H. Waugh, *Professor*
Donna Weir, *Assistant Professor*
Barbara Weitz, *Instructor*
C. Kemp Williams, *Associate Professor*
Mehmet Yavas, *Professor*

Bachelor of Arts in English

Degree Program Hours: 120

Lower Division Requirements

Common Prerequisites

ENC 1101	Freshman Composition
ENC 1102	Literary Analysis

Recommended Courses

ENG 2012	Approaches to Literature
AML 2011	Survey of American Literature I
AML 2020	Survey of American Literature II
ENL 2011	Survey of British Literature I
ENL 2021	Survey of British Literature II

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Requirements

(30 hours in 3000 and 4000 level courses)

Periods: (Two courses - Six hours)

a. One course in British literature before 1800
   or
   One course in American literature before 1860
b. One course in British literature after 1800
   or
   One course in American literature after 1860

Note: In addition to these courses, the Department may designate specific courses each semester which will fulfill these requirements.

Shakespeare: (One course - Three hours)

ENL 4320	Shakespeare: Histories
ENL 4321	Shakespeare: Comedies
ENL 4322	Shakespeare: Tragedies

Linguistics: (One course - Three hours)

LIN 3013	Introduction to Linguistics
	or
LIN 4680	Modern English Grammar

Electives: (18)

Upper division electives in writing, film, literature, and/or linguistics. The English Department recognizes a continuing obligation to insure that its majors write well. The Chairperson may require any English major to take the appropriate composition course. An English major may choose to take a general program of English studies or may select one of the Department's three areas of emphasis: literature, language and linguistics, or creative writing. Majors should choose their English courses and electives in consultation with their advisors, especially upon entering the program.

Additional Approved Electives: (30)

Students should consult with a departmental advisor.

Minor in English

Students majoring in any other discipline may minor in English.

There are several advantages for obtaining this minor. First, students expand their knowledge of literature written in English, thus, make their college education more complete and rounded. Second, because in the courses that the Department of English offers writing skills are emphasized, students will polish and perfect forms for the development of complex and sophisticated arguments through the analysis of literary work; the training students receive in these courses will help them to point to the strengths and weaknesses of any piece of writing.

Requirements

Fifteen hours in 3000 and 4000-level courses

Period Courses: (Two courses - Six hours)

1. One course in British literature before 1800
   or
   One course in American literature before 1860
2. One course in British literature after 1800
   or
   One course in American literature after 1860

Note: In addition to these courses, the Department may designate specific courses each semester which will fulfill these requirements

3. Three courses (nine hours) at the 3000 and 4000-level in the Department of English.

Course Descriptions

Definition of Prefixes

AML-American Literature; CRW-Creative Writing; ENC-English Composition; ENG-English-General;

ENL-English Literature; HUM-Humanities; LIN-Linguistics; LIT-Literature;

AML 2011 Survey of American Literature I (3). Students read and discuss major American works written between 1620 and 1865. Works will be considered in an historical context.

AML 2020 Survey of American Literature II (3). Students will read and discuss major American works written between 1865 and the present. Works will be examined in an historical context.

AML 2602 African-American Literature (3). Offers a survey of African-American literature spanning its genesis to the present. Includes units on major eras and major figures in the development of the literary traditions. May be repeated.

AML 3004 American Folklore (3) An examination of the variety of American folklore from the very earliest expressions to the present.

AML 3032 The American Revolution in Literature (3). Study of writings created at the time of the American Revolution and those of later authors in order to evaluate how American writers have shaped our sense of the Revolution.

AML 3111 American Fiction to 1900 (3). Study of representative fiction by American authors from the Colonial period to 1900. Authors include Brown, Irving, Cooper, Hawthorne, Melville, Twain, Chopin, James, and others.

AML 3262 Modern Southern Short Story (3) The contributions of twentieth-century writers of the South to the short story genre. Includes the work of Faulkner, O'Connor, Welty and McCullers.

AML 3401 American Humor (3) This course examines the writings of American humorists from the beginnings to the present. Special attention is given to the writings of Twain and Thurber.

AML 4014 Studies in 19th-Century African American Literature (3). An examination of literary works written by African Americans during the 19th Century. May be repeated with change of content.

AML 4024 Studies in 20th-Century African American Literature (3). An examination of literary works written by African Americans during the 20th Century. May be repeated with change of content.

AML 4120 Modern American Fiction (3) Study of American novels and short stories written in the twentieth century. Among the writers to be read are John Barth, Alice Walker and Flannery O'Connor.

AML 4154 Modern American Poetry (3) Study of American poetry written in the twentieth century. Among the poets to be examined are Elizabeth Bishop, Gwendolyn Brooks and Richard Wilbur.

AML 4213 Studies in Colonial and Early American Literature (3). Students read, discuss, and write about literature of the Colonial and Early American periods from the time of the Puritans through the period of the Early Republic.

AML 4216 Colonial Literature (3). American Literature from the settlement of the continent through 1776.

AML 4221 Early National Literature (3). Examines the major literary works of the period 1776-1825.

AML 4223 Antebellum Literature (3). Examines the writings of the period 1825-1860, including Hawthorne, Poe, and Harriet Jacobs.

AML 4245 Modernism and Post-Modernism in American Literature (3). The course provides working definitions of modernism and post-modernism and will consider how the writers of the twentieth century use those outlooks while addressing political, social, and personal issues.

AML 4263 Contemporary Southern Writers (3) Study of the literature of the modern South, its uniqueness and variety. Some of the writers included are Tennessee Williams, Eudora Welty and William Faulkner.

AML 4621 Major African American Writers (3). An examination of selected African American writers. May be repeated with change of content.

AML 4624 African American Women Writers (3). A study of the writings of African American women. May be repeated with change of content.

AML 4300 Major American Writers (3). Each section of this course will consider the works of one, two, or three major American writers. The writers studied in this course will change from semester to semester. The course may be repeated for credit.

AML 4306 Mark Twain (3) Study of the writings of American humorist and novelist Mark Twain including *Roughing It, Innocents Abroad* and *Huckleberry Finn.*

AML 4312 Hemingway, Fitzgerald and Faulkner (3) Analysis of the most important novels of Hemingway, Fitzgerald and Faulkner including *The Sun Also Rises, The Great Gatsby* and *The Sound and the Fury.*

AML 4503 Periods in American Literature (3). Individual sections will read and discuss works in the context of such historical settings as the colonial, federal, antebellum, reconstruction, or modern periods. May be repeated.

AML 4930 Special Topics in American Literature (3). An examination of different aspects of American literature; may be repeated with a change of content.

AML 5305 Major American Literary Figures (3). Each section will consider the lifework of several authors such as Hawthorne, Melville, Whitman, Twain, James, Faulkner, Mailer, Wright, Baldwin. May be repeated.

AML 5505 Periods in American Literature (3). The literature and criticism regarding one specified period of American Literature, such as Colonial, Federal, Transcendental, Antebellum, and Twentieth Century. May be repeated with change of period. Prerequisite: Permission of the instructor.

CRW 2001 Introduction to Creative Writing (3). Beginning course designed to acquaint students with elementary critical vocabulary and writing skills necessary for the writing of poems and short fiction. Students may also be required to read and discuss published writing. Prerequisite: ENC 1101 and ENC 1102 or equivalent.

CRW 3111 Narrative Techniques (3). Analysis of and excercises in the elements of fiction: point of view, conflict, characterization, tone. Students will do various short assignments and one short story. Reading of published fiction will also be required. Prerequisite: CRW 2001.

CRW 3311 Poetic Techniques (3). Analysis of and exercises in poetic techniques. Students will write poems in which they employ one or more technical skills. Reading and discussion of published poems will be required. Prerequisite: CRW 2001.

CRW 4110 Writing Fiction (5). An intermediate course in writing fiction. May be repeated. Prerequisite: CRW 3111.

CRW 4310 Writing Poetry (5). An intermediate course in writing poetry. May be repeated. Prerequisite: CRW 3311.

CRW 4900 Independent Study in Creative Writing (3). Development and completion of an independent project in creative writing undertaken with the consent of the instructor. Prerequisite: CRW 2001.

CRW 4930 Special Topics in Creative Writing (1-5). A course designed to give students an opportunity to pursue special studies in aspects of creative writing not otherwise offered. May be repeated. Prerequisite: CRW 2001.

CRW 4931 Special Topics in Creative Writing (1-5). Gives students an opportunity to pursue special studies in aspects of creative writing not otherwise offered. May be repeated. Prerequisites: CRW 2001 and three hours of CRW on the 3000/4000 level.

ENC 1930 Essay Writing (3). A course in writing short descriptive, analytic, and argumentative essays. Does not fulfill core curriculum requirement. Students who have completed ENC 1101 or ENC 1102, or both, cannot receive credit for this course. Written work meets state composition requirement of 6,000 written words.

ENC 1101 Freshman Composition (3). Students will be introduced to the principles and process of expository, persuasive, and reflective writing. The first of a two-semester freshman composition sequence. Written work meets state composition requirement of 6,000 written words.

ENC 1102 Literary Analysis (3). A continuation of ENC 1101. Develops an analytical, aesthetic, and cultural sensitivity to literature and further explores the techniques of composition and library research.

ENC 1200 Business Letter and Reports (3). Intensive instruction and practice in the organization, content, and style of business letters of all kinds: special correspondence formats (bid proposals, customer relations), memoranda, feasibility reports, speeches, and group conference reports. Written work meets state composition requirement of 6,000 written words.

ENC 2210 Technical Writing (3). Effective presentation of technical and semi-technical information: technical description, information gathering, general technical reports, organization and development of information, process communication. Written work meets state composition requirement of 6,000 written words.

ENC 2301 Expository Writing (3). An advanced composition course in the techniques of exposition, argumentation, and persuasion. Written work meets state composition requirement of 6,000 written words.

ENC 3211 Report and Technical Writing (3). For business, professional, and scientific students needing practice in collecting, organizing, interpreting, and presenting factual material.

ENC 3311 Advanced Writing and Research (3). Provides instruction in the concepts and methods of critical response and argumentation, and in the formulation, analysis, and presentation of original research in extended academic papers. Written work meets state composition requirement of 6,000 written words. Prerequisites: ENC 1101, ENC 1102 or equivalent.

ENC 3317 Writing Across the Curriculum (3). An interdisciplinary, upper division, Gordon Rule, writing course in which students explore substance and style as they compose essays on subjects from various fields. Written work meets state composition requirement of 6,000 written words.

ENC 4240 Report Writing (3). Instruction and practice in writing reports for practical purposes. Collecting, organizing, and interpreting facts, then writing up findings in report form and style. Includes recommendation reports, use of graphical elements, writing manuals and instructions, physical research reports, feasibility reports, progress reports, other specialized report formats. Prerequisite: ENC 1200 or ENC 2210. Written work meets state composition requirement of 6,000 written words.

ENC 4241 Scientific Writing (3). Develops skills necessary to write laboratory reports, scientific proposals, articles, research reports, progress reports, and seminar presentations. Written work meets state composition requirement of 6,000 written words.

ENC 4930 Special Topics in Composition (3). Allows students to refine nonfiction writing skills in a variety of genres and roles. May be repeated. Prerequisites: ENC 1101, ENC 1102 or equivalent. Written work meets state composition requirement of 6,000 written words.

ENG 2001 Modes of Inquiry (3). A research and report writing course. A final research project is required. Basic bibliographical tools, library use, and technical and scientific reporting will be the main subject matter. There will also be an emphasis on style, structure, and tone in a variety of research modes.

ENG 2012 Approaches to Literature (3). In this course, students will study the process of analyzing the meaning and artistry of literary texts. They will read and interpret representative poems, short stories, and plays. Written work meets state composition requirement of 6,000 written words.

ENG 2100 Introduction to Film (3). This course will introduce students to the basic artistic and compositional elements of film and the analysis of the relationship between technical and aesthetic aspects of film. Prerequisite: ENC 1101.

ENG 3138 The Movies (3). Viewing and discussion of films, with attention to cinematic ways of story-telling and to the popular film as an expression of cultural values. May be retaken for credit with change of content.

ENG 4013 History of Literary Criticism (3). A study of the major texts in literary criticism and theory from Plato to the present.

ENG 4022 Rhetoric and Poetics (3). Ancient and modern theory and practice in discussing the formal properties of elevated language.

ENG 4023 Semiotics and Narratology (3). This course studies Semiotics (the science of signs and sign system) and Narratology (theories about the nature of narratives) in an attempt to characterize the nature of how a story gets told/shown.

ENG 4043 Contemporary Literary Theory and Criticism (3). An examination of the works of recent literary theorists.

ENG 4119 Film Humor and Comedy (3). Examines the nature of humor and comedy and its relation to film narrative. Films from all periods of cinematic history will be viewed.

ENG 4121 History of the Film (3). Discussion, with examples, of the development of cinematic art, from its European and American beginnings to its place as a major world art form.

ENG 4132 Studies in the Film (3). Intensive examination of the work of a particular nation, group, or director. May also explore various film genres, e.g., documentary, horror, the Western. With change of content, may be retaken for credit.

ENG 4134 Women and Film (3). An examination of how women have been represented in dominant commercial films and how women filmmakers have responded to the appropriation of the image of women through alternative film narratives.

ENG 4135 The Rhetoric of Cinema (3). This is an examination of how films are constructed cinematically and narratively to involve audiences on aesthetic, intellectual and ideological levels.

ENG 4906 Independent Study (VAR). Individual conferences, assigned readings, and reports on independent investigations, with the consent of the instructor.

ENG 4936 Honors Seminar (3). Designed specifically for honors students and other superior, highly motivated students. Seminar topics will vary from semester to semester.

ENG 4949 Cooperative Education in English (1-3). A student majoring in English may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

ENL 2011 Survey of British Literature I (3). Students will read and discuss major British works written from the Old English period through 1750. Works will be examined within an historical context.

ENL 2021 Survey of British Literature II (3). Students will read and discuss major British works written between 1750 and the present. The works will be examined in an historical context.

ENL 3112 Development of the Novel: The 18th Century (3). A study of the development of the novel in England from the early attempts by Defoe and others to the Gothic novel.

ENL 3122 Development of the Novel: The 19th Century (3). A study of the development of the novel in England from Austen to Henry James; some of the novelists to be discussed are Bronte, Eliot and Dickens.

ENL 3132 Development of the Novel: The 20th Century (3). A study of the development of the novel in England from Conrad to the present; some of the novelists to be discussed are Lawrence, Woolf, and Joyce.

ENL 3261 19th Century British Women Novelists (3). Examines fiction written by women in the 19th century, including classical realist, gothic, sensation, working-class, and New Woman novels. Authors include Austen, Eliot, Bronte, and Gaskell.

ENL 4161 Renaissance Drama (3). A study of non-Shakespearean drama of the English Renaissance. Among the dramatists to be read are Jonson, Kyd, Marlowe and Webster.

ENL 4171 Restoration and 18th Century Drama (3). Representative plays from the period 1660-1800. May include plays by Dryden, Etherege, Wycherley, Otway, Congreve, Farquhar, Gay, Fielding, Goldsmith and Sheridan.

ENL 4210 Studies in Medieval Literature (3). Students will read, discuss and write about works of medieval English literature from the time of Beowulf to that of Chaucer.

ENL 4212 Medieval Women Writers (3). The contributions of medieval women to literary history are examined. Among the writers to be studied are Margery Kemp and Marie de France.

ENL 4222 Studies in Renaissance Literature (3). Students will read, discuss, and Renaissance excluding William Shakespeare.

ENL 4225 Spenser (3). Study of the works of one of the most important figures of the sixteenth century including *The Faerie Queen*, *The Shepheards Calender* and *Amoretti.*

ENL 4222 Renaissance: Prose and Poetry (3). A study of Renaissance poetry and prose to suggest their contributions to literacy history. Among the writers to be read are Wyatt, Sidney, Donne, More and Bacon.

ENL 4230 Studies in Restoration and 18th-Century Literature (3). An in-depth study of the major figures in English Literature from 1660 to 1800, a period of transition between the Renaissance and modern times. Some of the writers who will be studied are Dryden, Pope, Swift, Jonson, and Fielding.

ENL 4241 Romanticism I (3). Focuses on the first generation of Romantic writers, including Blake, Wordsworth, Wollstonecraft, and Coleridge.

ENL 4242 Romanticism II (3). Focuses on the second generation of Romantic writers including Byron, Keats, Shelley, and Wollstonecraft-Shelley.

ENL 4243 Studies in Romanticism (3). Examination of recurring themes and motifs in Romantic literature.

ENL 4251 Victorian Literature (3). Study of the poetry and prose of the Victorian Age (1832-1901). Among the authors to be read are Dickens, Eliot, Carlyle, Ruskin, Arnold, Tennyson and Browning.

ENL 4254 Late Victorian Fiction (3). An examination of the variety of fiction written from 1880-1901. Some of the writers to be studied include Wells, Zangwill, Gissing and D'Arcy.

ENL 4260 Studies in 19th-Century British Literature (3). Students will read, discuss, and write about literary works produced by British Romantic and Victorian writers between the Age of Wordsworth and the death of Queen Victoria.

ENL 4273 Studies in Modern British Literature (3). This course focuses on the literature of the 20th Century, limiting itself to British writers, but including the various genres of the modern and post modern periods.

ENL 4274 Yeats and His Contemporaries (3). Studies the major works of William Butler Yeats and some of his contemporaries and associates.

ENL 4303 Major British Writers (3). Each section will consider the lifework of an author such as Chaucer, Spenser, Milton, Pope, Wordsworth, Dickens,

Browning, Joyce, or others. May be repeated.

ENL 4311 Chaucer (3). Study of Geoffrey Chaucer's contributions to English literary history. Among the works to be examined are *The Canterbury Tales, The Parliament of Fowls* and *The Book of the Duchess.*

ENL 4320 Shakespeare: Histories (3). Reading and informal dramatic interpretation of representative plays.

ENL 4321 Shakespeare: Comedies (3). Reading and informal dramatic interpretation of representative plays.

ENL 4322 Shakespeare: Tragedies (3). Reading and informal dramatic interpretation of representative plays.

ENL 4341 Milton (3). Study of the poetic and prose contributions of John Milton including the influence of the literature of antiquity on him and influence on subsequent poets.

ENL 4370 Virginia Woolf and Her Circle (3). Focusing on the works of Virginia Woolf. This course also explores how the members of the Bloomsburg Circle influenced this English novelist.

ENL 4503 Periods in English Literature (3). Individual sections will read a group of literary works from one specified period of English literature, such as the Medieval, Renaissance, Victorian, twentieth-century and contemporary periods. May be repeated with change of period.

ENL 4930 Special Topics in English Literature (3). An examination of the different aspects of English literature. May be repeated with change of content.

ENL 5220 Major British Literary Figures (3). Each section will consider the lifework of an author such as Chaucer, Spenser, Milton, Pope, Wordsworth, Dickens, Browning, Joyce, or others. May be repeated.

ENL 5505 Periods in English Literature (3). The literature and criticism regarding one specified period of English Literature, such as Medieval, Renaissance, Victorian, Twentieth Century, and Contemporary. May be repeated with change of period. Prerequisite: Permission of the instructor.

LIN 2002 Introduction to Language (3). The study of the nature of human language, its origins, and its relation to thinking behavior, and culture. An examination of the similarities and differences between spoken human languages, animal languages, and non verbal communication (including sign language); of language variation between dialects and between different historical stages of a language; and of writing systems.

LIN 2612 Black English (3). This course covers the varieties of Black English spoken in the Americas, the Caribbean, and West Africa. Focuses on the nature of these English varieties and their social uses within the community, literature, and educational system.

LIN 3013 General Linguistics (3). Study of the sounds, vocabulary, and sentence patterns of standard modern English. Other topics include meaning, social and regional dialects, language change, and style. Subsequent credit for LIN 3010 or SPN 3733 will not be granted.

LIN 3670 Grammatical Usage (3). The study of formal, traditional usage of English grammar and mechanics. Prerequisites: ENC 1101 and ENC 1102.

LIN 4122 Historical Linguistics (3). The study of linguistic methodology for determining historical and genetic relationships among languages. Prerequisite: Introductory course in Linguistics or permission of the instructor.

LIN 4321 General Phonology (3). The study of phonological processes in language and linguistic methodology for phonological analysis. Prerequisite: Introductory course in Linguistics or permission of the instructor.

LIN 4430 General Morphology and Syntax (3). The study of linguistic methodology for determining the morphological and syntactic structures of languages. Prerequisite: Introductory course in Linguistics or permission of the instructor.

LIN 4612 Black English (3). This course is a linguistic approach to the characteristics and functions of Black English and the current social controversies surrounding it. Prerequisite: Permission of the instructor.

LIN 4651 Gender and Language (3). Examines the evidence on a variety of questions regarding women and language, including women's speech in English and other languages, sexist language, and the relationship between language and societal attitudes towards women.

LIN 4680 Modern English Grammar (3). Practical study of syntax.

LIN 4702 Applied Linguistics (3). Linguistics in the classroom. English as a second language. Stylistics. Dialects. Prerequisite: LIN 3013.

LIN 4801 Semantics (3). The study of the semantic structure of languages. The structures underlying the meanings of words and underlying syntactic structures. Prerequisite: Introductory course in Linguistics or permission of the instructor.

LIN 4905 Independent Study (VAR). This course is designed for students who wish to pursue specialized topics in advanced Linguistics: phonetics, phonology, morphology, syntax, semantics, psycholinguistics, historical linguistics, or language contact. Prerequisite: Introductory course in Linguistics or permission of the instructor.

LIN 5211 Applied Phonetics (3). Study of sounds and suprasegmentals of English. Comparison of phonetic features of English with those of other languages. Universal constraints and markedness in learning second/foreign language pronunciation. Prerequisites: LIN 3010, LIN 3013, or LIN 5018 or the equivalent.

LIT 2010 Introduction to Fiction (3). This course offers an introduction to the basic elements of prose fiction: symbolism, plot, imagery, structure, characterization, style, point of view. Prerequisite: ENC 1101.

LIT 2030 Introduction to Poetry (3). This course offers an introduction to the basic elements of poetry: imagery, figurative language, diction, style, tone, prosody. Prerequisite: ENC 1101.

LIT 2040 Introduction to Drama (3). This course will introduce the student to the basic elements of drama and its various forms, modes, and techniques. Students will read 10-12 plays by representative English, American, and European authors. Prerequisite: ENC 1101.

LIT 2110 World Literature I (3). Surveys the literature of many cultures from the beginning of written texts through the 16th century. Usually excludes British works.

LIT 2120 World Literature II (3). This course surveys the literature of Asia and Europe from the 17th century to the present. It gives attention to the

themes and world views these works embody, as well as to their artistry.

LIT 3022 The Short Novel (3). An examination of the variety of short novels that have been written in the past three centuries. Short novels from Europe and the Americas are discussed.

LIT 3050 Forms of Satire (3). This course will discuss the history and the different forms of satire from the Romans to the present, including the works of Horace, Juvenal, Swift, and Byron.

LIT 3132 Arthurian Literature (3). The legend of King Arthur is examined both in the original medieval version and in the subsequent retelling.

LIT 3145 Continental Novel (3). A study of the works of the major European novelists of the 19th and 20th centuries. Some of the writers whose work are read in translation are Tolstoy, Mann, and Flaubert.

LIT 3170 Topics in Literature and Jewish Culture (3). An examination of literature by or about Jews in a variety of national, cultural, or historical contexts. May be repeated with change of content.

LIT 3190 Survey of Caribbean Literature (3). The narratives, poetry, and fiction from the beginning of the Caribbean literary tradition to the present time.

LIT 3200 Themes in Literature (3). Individual sections will read and discuss works relating to topics of current and enduring interest. Discussion of literature as it reflects the identities of men and women: their places in families in past, present, and future societies, in the natural world, and the cosmic order. May be repeated.

LIT 3331 Classics of Children's Literature (3). An examination of literary texts that form part of the imaginative experience of children, as well as part of our literary heritage.

LIT 3383 Women in Literature (3). Students will examine the images of women created by European and American writers. The course will also explore the roles, historical and contemporary, of women writers.

LIT 3384 Caribbean Women Writers (3). Examination of the writings of Caribbean women.

LIT 3702 Major Literary Modes (3). Individual sections will read and discuss the literary expression of heroic, tragic, comic, satiric, mythic, realistic, or others formalized views of human existence. May be repeated.

LIT 3202 Morality and Justice in Literature (3). A study of the ways literary texts articulate the values of their society.

LIT 3930 Special Topics (3). A course designed to give students an opportunity to pursue special studies not otherwise offered. May be repeated with change of content.

LIT 4001 Major Literary Genres (3). Individual sections will read and discuss the form and development of novels, drama, poetry, short fiction, or such special forms as biographies, folksongs and tales, or essays, among other genres. May be repeated.

LIT 4041 17th Century Drama (3). A study of Western European drama of the seventeenth century including Calderon, Jonson, Tirso de Molina, Corneille, Racine, Wycherley, and Congreve.

LIT 4188 Regional Literature in English (3). Individual sections will discuss English writing in Ireland, Scotland, Wales, Canada, the Caribbean, India, sub-Saharan Africa, and Oceania, as well as distinctive regions in England and America. May be repeated.

LIT 4192 Major Caribbean Authors (3). Examines the literary achievements of major writers of the Caribbean region in the social, political, and cultural contexts of the English, French, and Dutch Caribbean.

LIT 4351 Major African Writers (3). Surveys a variety of literary texts relevant to life in post-colonial Africa.

LIT 4403 Literature Among the Arts and Sciences (3). Individual sections will relate the study of literature to other disciplines in the humanities, fine arts, the social and natural sciences. May be repeated.

LIT 4420 The Psychological Novel (3). This course concentrates on novels which explore the complexities of the human psyche.

LIT 4930 Special Topics (3). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. May be repeated.

LIT 4931 Special Topics in Women's Literature (3). An examination of different aspects of literature by women. May be repeated with a change of content.

LIT 4950 Czech Study Abroad (3). Covers the major literary movements and figures in the Czech Republic and Slovakia that have influenced the Western literary canon. The course is taught by FIU and Czech faculty. Prerequisite: Permission of the Instructor.

LIT 5934 Special Topics (3). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. May be repeated.

Environmental Studies

David Bray, *Associate Professor and Chairperson*
Bradley Bennett, *Associate Professor*
Mahadev Bhat, *Associate Professor*
Alice Clarke, *Assistant Professor*
Constantine Hadjilambrinos, *Assistant Professor*
Krishnaswamy Jayachandran, *Assistant Professor*
Joel Heinen, *Associate Professor*
Fiona Horsfall, *Research Scientist (National Hurricane Center)*
Stephen P. Leatherman, *Professor (International Hurricane Center)*
David Lee, *Professor*
Michael McClain, *Assistant Professor*
Jack Meeder, *Research Scientist (Southeast Environmental Research Program)*
John Parker, *Professor*
Tom Pliske, *Instructor*
Gary Rand, *Associate Professor*
Mike Ross, *Research Scientist (Southeast Environmental Research Program)*
Keqi Zhang, *Research Scientist International Hurricane Center*

Affiliated Faculty

Jerry Brown, *Sociology/Anthropology*
Janet Chernela, *Sociology/Anthropology*
Jim Fourqurean, *Biological Sciences*
David Genereux, *Geology*
Joel Gottlieb, *Political Science*
Kevin Hill, *Political Science*
James Huchingson, *Religious Studies*
Rudolf Jaffe, *Chemistry*
Jeff Joens, *Chemistry*
Ronald Jones, *Biological Sciences*
Suzanne Koptur, *Biological Sciences*
Rod Neumann, *International Relations*
Steve Oberbauer, *Biological Sciences*
George O'Brien, *Education*
Betsy Smith, *Social Work*
Berrin Tansel, *Civil and Environmental Engineering*
Joel Trexler, *Biological Sciences*
Bill Vickers, *Sociology/Anthropology*

This department prepares students to work in professions with an environmental focus. The Bachelor of Science degree emphasizes the chemical and ecological aspects of environmental analysis. The Bachelor of Arts degree is broader, with an emphasis on the political, social and economic aspects of environmental issues. This is an interdisciplinary program and particularly relies on assistance of faculty from outside departments who are affiliated with Environmental Studies.

Bachelor of Science in Environmental Studies

Degree Program Hours: 120

Lower Division Preparation
Required Courses
Common Prerequisites

BSC 1010	General Biology I	
BSC 1010L	General Biology I Lab	
BSC 1011	General Biology II	
BSC 1011L	General Biology II Lab	
CHM 1045	General Chemistry I	
CHM 1045L	General Chemistry I Lab	
CHM 1046	General Chemistry II	
CHM 1046L	General Chemistry II Lab	
GLY 1010	Introduction to Earth Science	
GLY 1010L	Introduction to Earth Science Lab	
	and	
EVR 3010	Energy Flow in Natural and Man-made Systems	
	or	
PHY 2023	Survey of General Physics	
MAC 2132	Pre-Calculus Mathematics	
	or	
MAC 1102	College Algebra	
	and	
MAC 1114	Trigonometry	

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Lower or Upper Division Requirements

ECO 2023	Microeconomics	3
STA 3111	Statistics I	4
STA 3112	Statistics II	2
	or	
MAC 2311	Calculus I	4
CHM 2200	Survey of Organic Chemistry	3
CHM 2200L	Survey of Organic Chemistry Lab	1
	or	
CHM 2210	Organic Chemistry I	4
CHM 2210L	Organic Chemistry I Lab	1
	and	
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1

Upper Division Program

Recommended Courses

ENC 2210	Technical Writing	3
POS 2042	American Government	3
	or	
POS 3424	Legislative Process	3
REL 3492	Earth Ethics	3

Required Courses
Three of the four following courses:

EVR 4026	Ecology of Biotic Resources	3
EVR 4211	Water Resources	3
EVR 4231	Air Resources	3
EVR 4312	Energy Resources	3
PCB 3043	Ecology	3
PCB 3043L	Ecology Lab	1
CHM 3120	Quantitative Analysis	3
CHM 3120L	Quantitative Analysis Lab	2
ECP 3302	Introduction to Environmental Economics	3
PUP 4203	Environmental Politics	3
	or	
EVR 4352	U.S. Environmental Policy	3
EVR 4920	Environmental Studies Seminar	1
EVR 4905	Independent Study	2
Additional Environmental Studies Courses[1]		6
Electives		14

[1]Selected from an approved list of EVR and EVS courses within the Department.

Students are urged to develop an area of specialization of 12 to 15 credits or a minor in consultation with an advisor.
Total 60 semester hours

Bachelor of Arts in Environmental Studies

Degree Program Hours: 120

Lower Division Program

Recommended Courses

PSC 1515	Energy and the Natural Environment.

Common Prerequisite

ECO 2023	Principles of Microeconomics

Two of the following:

BSC 1011/1011L	Organismal Biology and Lab
CHM 1032/1032L	Chemistry & Society and Lab
GLY 1010/1010L	Introduction to Earth Science

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program

Recommended Courses

ENC 3211	Report & Technical Writing	3
POS 2042	American Government	
	or	

POS 3424	Legislative Process	3

Required Courses: (32)

EVR 3010	Energy Flow in Natural and Man-made Systems	3
EVR 3011	Environmental Resources and Pollution	3
EVR 3011L	Environmental Resources and Pollution Lab	1
EVR 3013	Ecology of South Florida	3
EVR 3013L	Ecology of South Florida Lab	1
EVR 4415	Population & Environment Issues	3
EVR 4352	US Environmental Policy	3
	or	
PUP 4203	Environmental Politics	3
REL 3492	Earth Ethics	3
	or	
ANT 3403	Cultural Ecology	3
STA 3111	Statistics I	4
ECP 3302	Introduction to Environmental Economics	3
EVR 4905	Independent Study	2
EVR 4920	Environmental Seminar	1
EVR 4869L	Environmental Problem Solving Lab	2

Area of Specialization Courses: (12)

The student must take at least twelve additional credits in an approved area of specialization, such as energy and resource management, human ecology, environmental education, environmental policy, international environmental issues, geography or ecology. Six of the 12 credits must be from EVR courses. *Note*: Minors may be substituted for an area of specialization.

Electives	16
Total	**60 semester hours**

Minor In Environmental Studies

Required Courses

1. Four of the following approved courses, including at least two of the first four.

EVR 4026	Ecology of Biotic Resources	3
EVR 4211	Water Resources	3
EVR 4231	Air Resources	3
EVR 4312	Energy Resources	3
EVR 4401	Conservation Biology	3
EVR 4323	Restoration Ecology	3

2. One of the following courses:

EVR 4415	Population and Environment Issues	3
EVR 4321	Sustainable Resource Development	3
EVR 4352	US Environmental Policy	3
Total Credits		15

Grades of 'C' or better required for all courses. A list of additional approved environmental science courses, subject to change, is available in the Department of Environmental Studies.

Cooperative Education

Students seeking the baccalaureate degree in environmental studies may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Division of Student Affairs. The student spends one or two semesters fully employed in industry or a governmental agency. For further information consult the Department of Cooperative Education.

Environmental Internships

Students interested in job-related academic internships should enroll in the Environmental Studies office. For details on compensation, benefits, and academic credit, contact Dr. Jack Parker.

Course Descriptions

(Course descriptions are also found in catalog sections of all participating departments. For assistance see an advisor.)

Definition of Prefixes

EVR-Environmental Studies.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

EVR 1001 Introduction to Environmental Sciences (3). A physical science course for non-science majors, emphasizing air and water pollution, water rescources, solid waste management, and energy resources. (F,S, SS)

EVR 1001L Introduction to Environment Sciences Lab (1). Laboratory analysis and field trips on topics and concepts covered in Introduction to Environmental Sciences. (F,S,SS)

EVR 1017 The Global Environment and Society (3). A broad introduction to the impact of social and economic processes on the global environment, including historical and comparative dimension. (F, S)

EVR 3010 Energy Flow in Natural and Man-made Systems (3). A course for non-science majors, examining energy use and efficiency, nuclear and renewable energy sources (including solar energy), and their environmental impacts. Prerequisite: College algebra or equivalent. (F,S)

EVR 3029 The Everglades (3). An interdisciplinary examination of the Everglades system, including natural history, human history, esthetics, and politics/policy of restoration.

EVR 3011 Environmental Resources and Pollution (3). A course for non-science majors, focusing on dynamics of pollution and environmental toxicology with emphasis on energy consumption and production, solid wastes, and air and water resources. (F,S,SS)

EVR 3011L Environmental Science: Pollution Lab (1). Laboratory and field analyses of topics and concepts covered in EVR 3011. Corequisite: EVR 3011. (F,S,SS)

EVR 3013 Ecology of South Florida (3) EVR 3013L Ecology of South Florida Lab (1). A course for non-science majors, offering an introduction to the ecology of South Florida through lectures and a series of field trips into several unique ecosystems, such as the Everglades, hardwood hammocks, and coastal regions. The course also deals with natural resource conservation, wildlife management, endangered species, and wilderness issues. (F,S,SS)

EVR 3402 Asian Environmental Issues (3) An overview of emerging environmental issues in Asian countries. Discussion of cultural, economic, and political systmes of the region and their influence on the environment.

EVR 3931 Topics in Environmental Studies (3). An intensive analysis of a current environmental topic. Course may be repeated with change in content.

EVR 3949/EVR 4949 Cooperative Education in Environmental Studies (1-3). One semester of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluations will be required of each student. (F,S,SS)

EVR 4026 Ecology of Biotic Resources (3). The study of renewable natural resources of the earth's biomes, particularly those of tropical forests, the factors influencing their productivity, conservation, and human use. Prerequisites: BSC 1010 and BSC 1011.

EVR 4211 Water Resources (3). A seminar dealing with various aspects of water use, water pollution problems, chemistry and ecology of South Florida's waters. Ecology is recommended. Prerequisites: CHM 1045 and CHM 1046 or equivalent and general biology. (F)

EVR 4231 Air Resources (3). Common air pollutants - their sources and methods of control. Different legislative and administrative approaches will be studied. Prerequisite: CHM 1045 and CHM 1046 or equivalent. (S)

EVR 4312 Energy Resources (3). Seminar dealing with power and energy production in modern society, fundamental energy relationships of industrial and domestic processes. Prerequisite: EVR 3010 or PHY 2023 or equivalent. (S)

EVR 4321 Sustainable Resource Development (3). An overview of social, economic and ecological approaches to sustainable resource development. Examines various policies for harmonizing economic growth and environmental sustainability.

EVR 4323 Restoration Ecology (3). Principles and practices of environmental restoration, re-creation and enhancement. Examines ecological theory that relates to restoration through case studies from southern Florida. Prerequisites: EVR 3013 or PCB 3043 or permission.

EVR 4351 U.S. Energy Policy (3). Policies governing the utilization of energy in the U.S. Focuses on the physical, political and social constraints that shape energy policy in this country. Prerequisites: EVR 3010 or permission of the instructor.

EVR 4352 U.S. Environmental Policy (3). Introduction to U.S. environmental policy. Reviews primary U.S. environmental legislation and the role of regulation.

EVR 4401 Conservation Biology (3). Applies modern theory from ecology and population genetics to conservation issues. Topics include population viability studies, reserve design, forms of rarity, and policy issues. Prerequisites: BSC 1010 and BSC 1011.(S)

EVR 4415C Population and Environment Issues (3). Examines the history, current status and projected growth of the human population in relation to environmental issues. Prerequisite: College algebra and STA 3111 (or equivalent).(F)

EVR 4592 Soils and Ecosystems (3). A review of basic soil science concepts; analyses of basic physical and chemical properties of soils, emphasizing soils in South Florida ecosystems. Prerequisite: BSC 1010 and CHM 1045, or permission of the instructor.

EVR 4869L Environmental Problem Solving Lab (2). Provides first-hand experience in solving environmental problems (problem definition, study design, data collection, analysis & reporting). Includes use of case study, social survey, computer modeling and GIS techniques. Prerequisities: STA 3111, ECO 2023 and either EVR 3010, EVR 3011 or EVR 3013.

EVR 4905 Research and Independent Study (Var). Student develops and carries out research project with guidance from professor. Permission of the instructor.

EVR 4920 Environmental Studies Seminar (1). Series of talks by FIU and external experts addressing both development of professional skills and current environmental topics. Students prepare short presentations.

EVR 4934 Special Topics (1-3). Advanced undergraduate level course dealing with selected environmental topics. Course may be repeated with change in content.

EVR 5061 South Florida Ecology: Field Studies (3). Introduction to ecology of South Florida. Series of field trips to unique ecosystems (Everglades, hardwood hammocks, coastal regions). No science background required. Intended for teachers. Not intended for Environmental Studies graduate students.

EVR 5065 Ecology of Costa Rican Rainforest (3). Intensive study of Central American tropical forest ecosystems conducted for two weeks in Costa Rica in sites ranging from lowland to high mountains. Primarily for teachers. Prerequisites: Graduate standing or permission of the instructor. (SS)

EVR 5066 Ecology of the Amazon Flooded Forest (3). Study of the ecology of the flooded forest with emphasis on the relationships between plants and animals and the annual flooding cycle. The course includes a two-week field study at river camp in Peru. Prerequisites: Graduate standing or permission of the instructor. (SS)

EVR 5067 Tropical Forest Conservation and Utilization (3). Distribution and classification of tropical forest ecosystems, their description and the ecological principles governing their function. Factors influencing tropical forest utilization and destruction, and strategies for sustainable use and conservation. Prerequisites: EVR 5355 or permission of the instructor.

EVR 5141 Environmental Nuclear Chemistry (3). Nuclear reactions and the nature of radioactivity. Properties and uses of radioactive isotopes, fission, and fusion. Introduction to reactor technology. Consent of instructor required.

EVR 5236 Air Pollution Dynamics (3). A course designed to give an understanding of the fates of atmospheric pollutants. Scavenging processes in the atmosphere; radiation, residence times, chemical reactions, global transport process, point source dispersion and modeling calculations. Prerequisite: EVS 3360 or EVR 4231.

EVR 5300 Topics in Urban Ecology (3). Topics include urban and suburban ecosystems emphasizing energy relations, ecological functions of urban landscapes, urban wildlife, urban forestry and ecological issues relevant to human health and well-being. Prerequisites: PCB 3043 or permission of the instructor.

EVR 5313 Renewable Energy Sources (3). An analysis of renewable energy sources and energy efficiency including wind, biomass, geothermal, hydroelectric, solid waste, solar heating, solar cooling, and solar electricity. Prerequisite: Permission of the instructor.

EVR 5315 Energy Resources and Systems Analysis (3). Detailed analysis of energy flows in natural and man-made systems. Energy systems analysis. Energy use patterns. Conventional and alternate sources of energy.

EVR 5320 Environmental Resource Management (3). The scientific and philosophical basis for the management of renewable and non-renewable energy, mineral, air, water, and biotic resources. Prerequisite: Graduate standing or permission of the instructor. (F)

EVR 5350 International Organizations & Environmental Politics (3). The role of international organizations in environmental politics and the process of their formation and change in response to environmental problems. Prerequsite: Graduate standing or permission of the instructor.

EVR 5353 International Energy Policy (3). Focuses on the distribution of global energy resources and related issues. A comparison of the energy policies of various countries serves as the basis for exploring alternative energy policy approaches. Prerequisites: EVR 5355 or permission of the instructor.

EVR 5355 Environmental Resource Policy (3). A survey of international and national environmental policy and the legal, economic, and administrative dimensions of international accords and selected U.S. law. Prerequisites: EVR 5320 or permission of the instructor. (S)

EVR 5360 Protected Area Management (3). Interdisciplinary examination of ecological, administrative, and socio-economic aspects of managing protected natural areas. Case studies from developed and developing nations.

EVR 5405 International Biological Conservation Accords (3). Survey of international biological conservation agreements. Topics include bilateral migratory wildlife agreements, the Berne Convention on Migratory Wildlife, CITES, Ramsar, the UNCED Biodiversity Treaty and the Statement of Principles on Forests. Prerequisites: EVR 5355 or permission of the instructor.

EVR 5406 U.S. Endangered Species Management (3). History and implementation of the U.S. Endangered Species Act. Topics include legal and administrative aspects, reauthorization, procedures for recovery planning and conflict resolution, and biological measures of success. Prerequisites: EVR 5355 or permission of the instructor.

EVR 5407 International Organization & Environmental Politics (3). Examines the process of formation and change of international organizations in response to environmental problems, and the role of international organizations in environmental politics. Prerequisite: Graduate standing or permission of the instructor.

EVR 5410 The Human Population and Earth's Ecosystems (3). Explores the impact of the human population of Earth's ecosystems. Reviews current population data at global, regional, and local scales. Includes study of specific South Florida carrying capacity issues.

EVR 5907 Research and Independent Study (VAR). The student works with a professor on a research project. Variable credit.

EVR 5935 Special Topics (VAR). A graduate-level course dealing with selected environmental topics. The content will not necessarily be the same each time the course is offered.

EVR 5936 Topics in Environmental Studies (3). An analysis of several current environmental topics. Recommended for primary and secondary school teachers.

EVS 5194 Applied Soil Biology (3). Examines biology of soil organisms and biologically-mediated chemical transformations occuring in soil ecosystems. Prerequisite: BSC 1011.

Geology

Gautam Sen, *Professor and Chairperson*
Luis Bartolucci, *Courtesy Professor*
Bradford Clement, *Professor*
Laurel Collins, *Research Scientist*
Grenville Draper, *Professor*
David Genereux, *Associate Professor*
Rosemary Hickey-Vargas, *Professor*
Michael Gross, *Associate Professor*
Jose Longoria, *Professor*
Andrew Macfarlane, *Associate Professor*
Florentin Maurrasse, *Professor*
Claudia Owen, *Lecturer*
Edward Robinson, *Courtesy Professor*
Dean Whitman, *Assistant Professor*

Geologists are employed widely in environmental and hydrologic assessment and remediation, petroleum, mining, and mineral industries. Geologists also are involved in basic research and teaching. Knowledge of geology is essential for understanding problems of groundwater supply, environmental hazards, geotechnical engineering, and natural resources.

Well-equipped laboratories in the Geology Department allow students to learn the major techniques of the Earth sciences. The geology program prepares students to become licensed Professional Geologists in the State of Florida.

The program offers a B.S. degree in Geology with an optional environmental geology track and a broader-based interdisciplinary B.A. in Geology. Only grades of 'C' or better will be accepted for required courses in either program option. A minor in geology is also available.

Bachelor of Science

Degree Program Hours: 120

Lower Division

BSC 1100	General Biology II
BSC 1100L	General Biology II Lab
CHM 1045	General Chemistry I
CHM 1045L	General Chemistry I Lab
CHM 1046	General Chemistry II
CHM 1046L	General Chemistry II Lab
GLY 1010	Introduction to Earth Science
GLY 1010L	Introduction to Earth Science Lab
GLY 1100	Historical Geology
GLY 1100L	Historical Geology Lab
MAC 2311	Calculus I
MAC 2312	Calculus II
	AND
PHY 2048	Physics with Calculus I
PHY 2048L	Physics with Calculus I Lab
PHY 2049	Physics with Calculus II
PHY 2049L	Physics with Calculus II Lab
	OR
PHY 2053	Physics without Calculus I
PHY 2053L	Physics without Calculus Lab I
PHY 2054	Physics Without Calculus II
PHY 2054L	Physics Without Calculus Lab II

Upper Division

GLY 3202	Earth Materials	3
GLY 3202L	Earth Materials Lab	2
GLY 4300	Petrology	3
GLY 4300L	Petrology Lab	2
GLY 4511	Stratigraphy	3
GLY 4511L	Stratigraphy Lab	1
GLY 4400	Structural Geology	3
GLY 4400L	Structural Geology Lab	1
GLY 4822	Introduction to Hydrogeology	3
	AND	
GLY 4791	Field Geology and Geologic Mapping	3-6
	OR	
GLY 3881	Environmental Geology Field Methods	3
	OR	
GLY 3782	Geology Field Excursion	3
Electives		9-12

Electives are three to four courses at the 3000 to 5000 levels offered by the Geology Department (but excluding Environmental Geology, GLY 3030, and Earth Resources, GLY 3510), selected to form a concentration, in consultation with a department advisor. For example, to form a concentration in environmental geology, a student might select from: Remote Sensing in the Earth Sciences (GLY 3754), Environmental Geology Field Methods (GLY 3881), and Geochemistry (GLY 5246).

Bachelor of Arts

Degree Program Hours: 120

This program is for the student who requires a broad background in geology for a career in science education or public or private administration dealing with Earth and Environmental Sciences.

Lower Division

BSC 1100	General Biology II
BSC 1100L	General Biology II Lab
CHM 1045	General Chemistry I
CHM 1045L	General Chemistry I Lab
CHM 1046	General Chemistry II
CHM 1046L	General Chemistry II Lab
GLY 1100	Historical Geology
GLY 1100L	Historical Geology Lab
MAC 2311	Calculus I
PHY 2053	Physics without Calculus I
PHY 2053	Physics without Calculus I Lab
PHY 2054	Physics without Calculus II
PHY 2054L	Physics without Calculus II Lab
	AND
GLY 1010	Introduction to Earth Science
GLY 1010L	Introduction to Earth Science Lab
	OR
GLY 3030	Environmental Geology
GLY 3030L	Environmental Geology Lab

Upper Division

GLY 3202	Earth Materials	3
GLY 3202L	Earth Materials Lab	2
GLY 4300	Petrology	3
GLY 4300L	Petrology Lab	2
GLY 4511	Stratigraphy	3
GLY 4511L	Stratigraphy Lab	1
GLY 4400	Structural Geology	3
GLY 4400L	Structural Geology Lab	1
GLY 4822	Introduction to Hydrogeology	3

Electives

Electives are three approved 3000 or 4000 level courses in geology (excluding Earth Resources, GLY 3510, and Environmental Geology, GLY 3030), other science departments, or the College of Engineering.

Minor in Geology

Required courses

GLY 1010 or GLY 3030, and GLY 1100, with labs, and four additional geology courses. At least two of the four additional courses must be taken with accompanying labs, one of which must be at the 4000 level.

Cooperative Education

Students seeking the baccalaureate degree in Geology may also take part in the Cooperative Education Program conducted with the Department of Cooperative Education in the Division of Student Affairs. The student spends one or two semesters fully employed in industry or a government agency. For further information consult the Department of Geology or the Department of Cooperative Education.

Course Descriptions

Note: Laboratories may not be taken prior to the corresponding lecture course. Laboratories must be taken concurrently where noted, but students must register for the laboratory separately.

Definition of Prefixes

EVS-Environmental Science; GEO-Geography/Systematic; GLY-Geology; MET-Meteorology; OCE-Oceanography; OCG-Oceanography-Geological; OCP-Oceanography/Physical.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

EVS 4164 Applied Environmental Geology (3). EVS 4164L Applied Environmental Geology Lab (1). A survey of the geological and geographical factors critical to man's attempt to contend with the natural processes. Construction problems, sewers, waste disposal, dams, ground water, and terrain evaluation in relation to the nature of the underlying substratum. Principles illustrated from South Florida and the Caribbean region in particular. Study of the geological factors involved in future development and growth of these areas, and conservation methods in relation to the geology of these areas. Prerequisites: GLY 1010, GEO 2200, and a sound background in mathematics, physics, and chemistry. Laboratory must be taken concurrently with the course. (S in alternate years)

GEO 2200 Physical Geography (3). GEO 2200L Physical Geography Lab (1). Survey of the physical environment relevant to studies in regional geography and earth sciences. Natural evolution of landforms, and the interacting processes responsible for these features. Environmental modification and deterioration caused by human interaction. Effects of these changes: socio-economic impact and geographic problems. Case studies illustrated from South Florida and the Caribbean region. (S in alternate years.)

GEO 3510 Earth Resources (3). A course for non-majors dealing with the nature, origin, and distribution of mineral resources. Geology of petroleum, coal, metals, etc., and problems of their exploitation and depletion. (F,S,SS)

GLY 1010 Introduction to Earth Science (3). GLY 1010L Introduction to Earth Science Lab (1). Basic survey of Earth materials and structure, plate tectonics, volcanoes, earthquakes, surface processes and groundwater, climate change, earth resources and the impact of geology on society. (Lab fees assessed) (F,S,SS)

GLY 1037 Environmental Hydrology for High School Students (1). Environmental issues surrounding the natural occurrence and human use of surface water and groundwater in South Florida. Includes field trips to local sites of hydrologic/environmental significance.

GLY 1100 Historical Geology (3). GLY 1100L Historical Geology Lab (1). An introduction to the geological history of the earth and the geological time scale. Evolution of animals and plants. Prerequisite: GLY 1010 or GLY 3030 or equivalent. Lecture and lab must be taken concurrently. (F)

GLY 2072 Earth's Climate and Global Change (3). Introduction to Earth's climate and the variations of climate through geological and historical time. Emphasis is placed on the importance of the interactions of Earth's crust, atmosphere, biosphere and oceans in affecting the planet's climate.(F in alternate years)

GLY 2072L Earth's Climate and Global Change Lab (1). Practical analysis of the important factors affecting Earth's Climate. Analysis of historical and geological records of climate change. Corequisite: GLY 2072. (F in alternate years)

GLY 3030 Environmental Geology (3). GLY 3030L Environmental Geology Lab (1). The composition and structure of the earth, the internal and external forces acting upon it and the resulting surface features. Case studies and general principles illustrated from South Florida and the Caribbean. Field trips expected. No prerequisites. (F,S,SS)

GLY 3034 Natural Disasters (3). A geological look at catastrophic events including earthquakes, volcanoes, tsunamis, mass movements, hurricanes, floods, and desertification. Emphasis on the geologic setting in which these natural disasters take place. Special attention will be given to compare similar disasters in the geologic past. Prerequisite: Physical science at the high school level.

GLY 3103 Dinosaurs (3). Survey of the different groups of dinosaurs. Dinosaur biology, geology, and the history of their discovery to further understanding of their life histories environments, and the causes of their extinction.

GLY 3103L Dinosaurs Laboratory (1). Survey of the different groups of dinosaurs. Laboratory study of dinosaur bones, prints and eggs to further our understanding of their life histories, environments, and the causes of their extinction. Corequisite: GLY 3103.

GLY 3157 Elements of Caribbean Geology (3). A survey of the geology of the Caribbean and neighboring regions in view of current data and modern concepts of global tectonics. The course summarizes the important points of Caribbean and Central American geology in their relation to mineral and energy resources; natural environmental disasters, especially seismic zones; agriculture; and the geologic potential for future development and industrialization. (F in alternate years)

GLY 3202 Earth Materials (3). Physical and chemical properties of minerals and mineral assemblages, such as rocks and soils. Processes of mineral formation. Prerequisites: GLY 1010 or permission of the instructor and General Chemistry. Corequisite: GLY 3202L.

GLY 3202L Earth Materials Lab (2). Physical and chemical properties of minerals, rocks and soils with emphasis on identification. Application of macroscopic methods, X-ray diffraction, polarized light microscopy, in situ and bulk chemical analysis. Prerequisites: GLY 1010 and GLY 1010L or permission of the instructor and General Chemistry. Corequisite: 3202. (F)

GLY 3220 Optical Mineralogy (3). GLY 3220L Optical Mineralogy Lab (1). Principles and use of the petrographic microscope. Optical properties of isotropic, uniaxial and biaxial minerals. Prerequisite: GLY 3200 or equivalent. Laboratory must be taken concurrently with course. (S)

GLY 3754 Remote Sensing in the Earth Sciences (3). Remote sensing methods for the exploration and investigation of geologic processes and earth resources; airphoto interpretation, processing and analysis of multi-band digital satellite imagery; GIS. Pre-

requisite: GLY 1010 or permission of the instructor. (S)

GLY 3760 Geological Map Analysis (3). Laboratory course dealing with analysis of geological maps and sections; theory and method of interpretation of surface outcrops on maps. Properties of simple geological structures. Recommended to be taken prior to GLY 4400 and GLY 4791. Prerequisites: Trigonometry, Introduction to Earth Science or equivalent (e.g. MAC 2132, GLY 3030 or equivalents). (F)

GLY 3782 Geology Field Excursion (1-3). A one to three-week field excursion in a region of interest to demonstrate the occurrence, appearance and processes of various geological phenomena. Course may be repeated. Prerequisite: GLY 1010. (F,S,SS)

GLY 3881 Environmental Geology Field Methods (3). Introduction to commonly used field methods in environmental geology including site evaluation, bore-hole geophysical and hydrogeological techniques, and topographic map skills. Prerequisites: GLY 1010 or GLY 3030.

GLY 3949/GLY 4949 Cooperative Education in Geology (1-3). One semester of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluations will be required for each student. (F,S,SS)

GLY 4036 Earth Sciences and Society (3). Explores the new directions of Earth Science studies and examines how they can enhance society's ability to make wise decisions on resource development, waste disposal, natural hazards. Prerequisites: GLY 1010 or GLY 3030.

GLY 4300 Petrology (3). Origin, composition and classification of igneous, sedimentary, and metamorphic rocks. Observational, theoretical, and experimental studies of rocks. Prerequisite: GLY 3202.

GLY 4300L Petrology Lab (2). Identification of rocks using macroscopic and microscopic techniques. Application of electron microprobe. Prerequisite: GLY 3202.

GLY 4400 Structural Geology (3). GLY 4400L Structural Geology Lab (1). Faults, folds, fractures and other rock structures; their description and representation on maps and diagrams; mechanics of their formation. Prerequisites: GLY 1010 or equivalent; knowledge of trigonometry and algebra. (S)

GLY 4450 Environmental and Exploration Geophysics (3). Introduction to geophysical methods used in exploration and environmental geophysics. Seismic methods; potential fields; electrical and EM methods; ground penetrating radar; geophysical well logging. Prerequisites: GLY 1010 or 3030; MAC 2312 PHY 2049 or 3054; or consent of instructor. Corequisite: GLY 4450L.(S)

GLY 4450L Environmental and Exploration Geophysics Laboratory (1). Acquisition and interpretation of exploration geophysical data. Seismic, gravity, magnetic, and geoelectrical methods; geophysical well logging. 4-5 field trips to sites in Dade County expected. Corerequisite: GLY 4450. Prerequisite: GLY 3360 or GLY 4400 or permission of the instructor. Corequisite: GLY 4450. (S)

GLY 4511 Stratigraphy (3). Stratigraphic principles applied to interpreting the rock record. Sediments, depositional environments and dynamics in the sedimentary record. Stratigraphic correlation and the development of the Geologic Time Scale. Prerequisites: GLY 3202.

GLY 4511L Stratigraphy Lab (1). Laboratory analysis of rock facies and index fossils used in the interpretation of the geologic record. Prerequisites: GLY 3202L.

GLY 4555 Sedimentology (3). GLY 4555L Sedimentology Lab (1). Sedimentary processes in the geological cycles, as illustrated in recent environments. Different groups of sedimentary rocks. Primary and secondary sedimentary structures. Physico-chemical properties and diagenetic processes. Analytical techniques applied to modern sedimentology of both loose and lithified sediments. Prerequisites: Introduction to Earth Science or equivalent; Earth Materials and Stratigraphy and a sound background in mathematics and chemistry. Laboratory must be taken concurrently with course. (S)

GLY 4650 Paleobiology (3). GLY 4650L Paleobiology Lab (1). Development of life as traced through the fossil record. Survey of the main groups of animals commonly found as fossils. Theories of evolution and extinction. Study of the major fossil groups used in biostratigraphic zonation, and as paleoecologic indicators. Prerequisites: Physical and historical geology, general biology, or the instructor's permission. Laboratory must be taken concurrently with course. (F)

GLY 4730 Marine Geology (3). GLY 4730L Marine Geology Lab (1). Survey of the main physiographic provinces of the ocean floor. Modem theories concerning the evolution of the crust; continental drift, seafloor spreading. Distribution and thickness of deep-sea sediments, and their relationship to the morphology and evolution of the crust. Deep-sea mineral resources. Marine geology of the Caribbean from recent data. Seabed assessment of mineral resources in the Caribbean and neighboring region. Prerequisites: OCE 3014, GLY 1010, or instructor's permission. Laboratory must be taken concurrently with course. (F)

GLY 4791 Field Geology and Geologic Mapping (3-6). A three-to six-week field instruction and practice in methods of constructing stratigraphic sections, structural cross sections and geologic mapping using topographic base maps, aerial photos, and surveying equipment. Prerequisites: GLY 4511 and GLY 4511L, GLY 4400 and GLY 4400L. (SS)

GLY 4812 Introduction to Ore Deposits (3). Major classes of metal deposits, their geologic settings and genetic theories, and case studies of great deposits. Environmental, economic and legal aspects of metal extraction, processing and use. Prerequisites: GLY 1010, GLY 1010L or GLY 3030, GLY 3030L

GLY 4822 Introduction to Hydrogeology (3). Principles of groundwater flow, determination of aquifer properties, geologic factors influencing groundwater flow and quality, legal/regulatory framework for hydrogeology. Prerequisite: One college-level course in physics, chemistry, geology, and calculus, or permission of the instructor. (F)

GLY 4823 Florida Geologic and Hydrologic Systems (3). Survey of geological formations of Florida and their relationship to hydrologic and mineral resources. Sedimentary facies in relation to their hydrologic properties. Prerequisites: GLY 4822 and GLY 4511 or permission of the instructor.

GLY 4910, GLY 4911 Undergraduate Research in Geology (VAR). Individual research under the supervision of a professor in the student's field of specialization or interest. Subject may deal with laboratory work, field, and/or bibliographical work. Field research in the Caribbean is encouraged. Variable credit to a maximum of 10 credits. Permission of the student's advisor is required. (F,S,SS)

GLY 5021 Earth Sciences for Teachers (3). Study of geological materials and processes, as covered in Introduction to Earth Science, but at a higher level and with additional assignments. Prerequisite: Permission of the instructor. Corequisite: GLY 5021L. (F,S,SS)

GLY 5021L Earth Sciences for Teachers Laboratory (1). Study of the properties of minerals and rocks; interpretation of topographic and geologic maps; study of the geology of Florida, including field trips. Prerequisite: Permission of the instructor. Corequisite: GLY 5021. (F,S,SS)

GLY 5158 Florida Geology (3). Detailed lithostratigraphic and biostratigraphic analyses of Southeast Florida and their relationship to tectonics, paleoclimates. Prerequisite: GLY 3511 and GLY 3511L. (S in alternate years)

GLY 5246 Geochemistry (3). GLY 5246L Geochemistry Lab (1). Origin of chemical elements and principles affecting their distribution in the solar system, solid earth and hydrosphere. Use of chemical data to solve geologic problems. Prerequisites: Introduction to Earth Science and General Chemistry. (F in alternate years)

GLY 5251 Water-Rock Interaction (3). Survey of geochemical processes at the water-rock interface. Topics include absorption of inorganic and organic ions, colloid stability in groundwater, mineral dissolution and precipitation. Prerequisites: CHM 1046, MAC 2312, GLY 4311 or permission of the instructor.

GLY 5283C Application of ICPES in Geochemistry (3). Determination of elemental abundances in rocks, soils, natural water using inductively coupled plasma emission spectroscopy (ICPES). Instrumental principles, sample selection and preparation methods and application of results to research. Prerequisites: CHM 1045, CHM 1046 or permission of the instructor. (S or SS)

GLY 5284 Electron Microprobe and Scanning Electron Microscopy (3). Involves imaging and analysis of geological and other materials using Electron Probe and Scanning Electron Microscope.

GLY 5284L Electron Microprobe and Scanning Electron Microscopy Lab (1). Involves imaging and analysis of geological and other materials using Electron Probe and Scanning Electron Microscope.

GLY 5286 Research Instrumentation and Techniques in Geology (3). Survey of techniques and instrumentation used in geological research, including computing and data handling. Prerequisite: Graduate standing or permission of the instructor. Corequisite: GLY 5286L. (F)

GLY 5286L Research Instrumentation and Techniques in Geology Lab (1). Introduction to advanced instrumentation and analytical techniques in Geology, including computing and data processing. Prerequisite: Graduate standing or permission of the instructor. Corequisite: GLY 5286. (F)

GLY 5298 Topics in Geochemistry (3). Seminar covering current research in selected areas of low-temperature geochemistry: oceans and oceanic sediments; continental waters and sediments; hydrothermal systems. Prerequisite: GLY 4555 or permission of the instructor. (F)

GLY 5322 Igneous Petrology and Geochemistry (3). Presentation and discussion of current topics in igneous petrology and geochemistry in a seminar format. Prerequisite: Permission of the instructor. (S)

GLY 5335 Metamorphic Geology (3). Metamorphic mineralogy; characteristics of low, medium and high pressure metamorphic rocks; pressure-temperature determinations; metamorphic textures; modeling and determination of P-T-t paths. (F)

GLY 5335L Metamorphic Geology Lab (1). Petrographic examination of metamorphic rocks. (F)

GLY 5346 Sedimentary Petrology (3). Systematic study of sedimentary rocks. Special emphasis on genetical aspects, geochemistry, paleontology, mineralogy, and microfacies. Emphasizes microscopic study. Prereq-uisite: GLY 4555. Corequisite: GLY 5346L. (F in alternate years)

GLY 5346L Sedimentary Petrology Lab (1). Laboratory studies of sediments and sedimentary rocks with emphasis on microscopic analyses and geochemical techniques. Prerequisite: GLY 4555 and GLY 4555L. Corequisite: GLY 5346. (F in alternate years)

GLY 5408 Advanced Structural Geology (3). Advanced treatment of the theory of rock mechanics to solve problems solve natural rock deformation. Prerequisites: GLY 4400, MAC 3413, or permission of the instructor. Corequisite: GLY 5408L. (S)

GLY 5408L Advanced Structural Geology Lab (1). Problem solving in theory of rock deformation. Experimental procedures in rock mechanics. Corequisite: GLY 5408. S

GLY 5425 Tectonics (3). Properties of the lithosphere; plate kinematics and continental drift; characteristics of plate boundaries; mountain belts; formation of sedimentary basins. Prerequisites: GLY 1010, 1100, 4400, 4310, 3200 or permission of the instructor. (S)

GLY 5446 Topics in Structural Geology and Tectonics (3). Selected advanced topics in structural geology and rock deformation. Latest advances in crustal tectonics. Prerequisite: GLY 5408. (F/S)

GLY 5415 Caribbean Geology and Tectonics (3). Integration of geologic and geophysical data to understand the evolution and present tectonic configuration of the Caribbean area. Prerequisite: Permission of the instructor.

GLY 5457 Analysis of Geophysical Data (3). Reduction and interpretation of geophysical data, including time series analysis, continuation of potential fields. Three-dimensional modeling of gravity, magnetic data, integrated geophysical surveys. Prerequisites: GLY 4450, PHY 2048, PHY 2049, MAC 2311, MAC 2312,

MAP 2302. Corequisite: GLY 5457L. (S)

GLY 5457L Analysis of Geophysical Data Lab (1). Field and laboratory applications of geophysical techniques. Computer aided analysis and three-dimensional modeling of gravity and magnetic data. Prerequisites: GLY 4450, PHY 2048, PHY 2049, MAC 2311, MAC 2312, MAP 2302. Corequisite: GLY 5457. (S)

GLY 5495 Seminar in Geophysics (2). Detailed investigation of current geophysical techniques, including topics on instrument design. Prerequisite: GLY 5457 or permission of the instructor. (F/S)

GLY 5546 Topics in Stratigraphy (3). Discussion of research projects and/or current literature in stratigraphic correlation as derived from sedimentologic principles and biozonation. Prerequisite: GLY 5346. (F)

GLY 5608 Advanced Paleontology I (3). Discussion of current literature and research projects on evolution, systematics functional morphology, with reports by members of the seminar. Prerequisites: GLY 4650, GLY 5609, or permission of the instructor. (F)

GLY 5621 Caribbean Stratigraphic Micropaleontology (3). Microscopic study of biostratigraphic type sections from the Caribbean area. Emphasis on planktonic foraminifera and radiolaria, paleoecologic and paleoclimatic interpretations. Prerequisite: GLY 4650 or permission of the instructor. (F)

GLY 5754 Applied Remote Sensing in the Earth Sciences (3). Application of remote sensing and image analysis in the earth sciences; qualitative and quantitative satellite image and air photo interpretation. Emphasis is on use of computer processing packages. Prerequisites: GLY 1010 or consent of instructor.

GLY 5776 GIS and Spactial analysis for Earth Scientists (3). Application of GIS technology to spatial problems in the Earth Sciences. Topics include: spatial stastics, sampling theory, surface estimation, map algebra, and suitability modeling.

GLY 5785 Caribbean Shallow-Marine Environments (3). Field study of multiple tropical environments in the Caribbean area. Dynamic processes and coastal evolution in response to natural and human-induced changes.

GLY 5786 Advanced Field Excursion (3). A study of the geology of a selected region of the world followed by 10-12 day field trip in order to study the field relationships of the geologic features. Special emphasis is given to stratigraphic, structural and tectonic relationships of lithic package. Prerequisite: Permission of the instructor. (SS)

GLY 5808 Mining Geology (3). Application of theoretical models of ore formation to exploration and the use of geochemical and geophysical techniques in the search for ore deposits. Prerequisites: GLY 4311 and CHM 1046. (F/S)

GLY 5816 Economic Geology (3). Economically important metal deposits of sedimentary, igneous and hydrothermal origins and their geologic settings and characteristics. Prerequisites: GLY 1010, GLY 4311, CHM 1045, CHM 1046. (F)

GLY 5826 Hydrogeologic Modeling (3). Techniques used in modeling groundwater flow and solute transport in geologic systems. Case studies of significant aquifers. Prerequisites: GLY 5827, MAP 2302, or permission of the instructor. (S,SS)

GLY 5827 Hydrogeology (3). Physics of flow in geological media. Saturated and unsaturated flow, groundwater and the hydrologic cycle, estimating hydraulic parameters of aquifers, introduction to chemical transport. Prerequisite: GLY 1010, MAC 2312, and PHY 2053, or permission of the instructor. (F)

GLY 5827L Hydrogeology Lab (1). Laboratory, field, and computer exercises to complement GLY 5827. (F)

GLY 5828 Chemical Hydrogeology and Solute Transport (3). Quantitative analysis of hydrologic, geologic, and chemical factors controlling water quality and the transport and fate of organic and inorganic solutes in the subsurface. Prerequisite: GLY 5827. (S)

GLY 5857 Geology for Environmental Scientists and Engineers (3). Characterization of rocks and rock masses; geological maps; seismic hazards; weathering of rocks; hydrologic cycle; slope stability; coastal processes; geophysical techniques. Course includes field trips in the South Florida region. Prerequisites: CHM 1045, GLY 1010 or permission of the instructor. (S)

GLY 5931 Graduate Seminar (1). Presentation or critical examination of current research problems in geology. A selection of topics is considered each term. Topics may also include individual research in the student's field of investigation. Prerequisite: Graduate standing or permission of the instructor. (F,S,SS)

OCE 1001 Introduction to Oceanography (3). The oceans, their nature and extent. Water of the oceans, chemical balance. Marine provinces, sediments and their relation to sea life and oceanic circulation, coastal provinces, sediments and their relation to sea life and oceanic circulation, coastal and deep-ocean circulation. Waves, tides, tsunamis. One field trip expected. (F,S,SS)

OCE 3014 Oceanography (3). The ocean origin, physical properties, salinity, temperature, sound. Radiative properties, heat budget and climatic control. Tides, wind-driven motion-monsoon circulation. El Nino phenomenon. Subsurface water masses. Oceanic circulation and paleoclimates. (F,S,SS)

History

William O. Walker III, *Professor and Chairperson*
Nina Caputo, *Assistant Professor*
Daniel A. Cohen, *Associate Professor*
N. David Cook, *Professor*
Hugh Elton, *Assistant Professor*
Christopher Gray, *Assistant Professor*
Mitchell Hart, *Assistant Professor*
Sherry Johnson, *Assistant Professor*
Alan Kahan, *Associate Professor*
Howard Kaminsky, *Professor Emeritus*
Eric J. Leed, *Professor*
Alex Lichtenstein, *Associate Professor and Director of Graduate Studies*
Felice Lifshitz, *Associate Professor*
Kenneth Lipartito, *Professor*
Joseph F. Patrouch, *Associate Professor*
Brian Peterson, *Associate Professor*
Joyce S. Peterson, *Associate Professor and Associate Dean*
Darden Asbury Pyron, *Professor*
Howard B. Rock, *Professor*
Mark D. Szuchman, *Professor and Associate Dean*
Clarence Taylor, *Associate Professor*
Victor M. Uribe, *Assistant Professor*
Kirsten Wood, *Assistant Professor*

Bachelor of Arts in History

Degree Program Hours: 120

Students interested in teacher certification should contact the College of Education at 348-2721.

Lower Division Preparation

Common Prerequisites

Complete two of the following:

AMH 2000	Origins of American Civilization
AMH 2002	Modern American Civilization
AMH 2010	American History 1607-1850
AMH 2020	American History 1850-Present
EUH 2011	Western Civilization: Early European Civilization
EUH 2021	Western Civilization: Medieval to Modern Europe
EUH 2030	Western Civilization: Europe in the Modern Era
LAH 2020	Latin American Civilization
WOH 2001	World Civilization

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program: (60)

One course, at the 3000 or 4000 level in each of the following areas, (indicated in brackets at the end of each course description in the University Catalog).

Medieval Europe or Ancient History [1]	3
Modern Europe [2]	3
The United States [3]	3
Latin America or Africa [4]	3
HIS 4935 Senior Seminar	3
Any five additional History courses (at the 3000 or 4000 level)	15
Electives (at the 3000 or 4000 level) in any Department at FIU, to make up the prescribed number of credits required for graduation. (Ten credits maximum at the 1000 or 2000 level for those entering as juniors or seniors).	30

Minor in History

Five general History courses (at the 3000 or 4000 level) 15 semester hours.

Course Descriptions

Definition of Prefixes

AFH-African History; AMH-American History; EUH- European History; HIS-General; LAH-Latin American History; WOH-World History

AFH 4100 History of Africa I (3). African history from the origins of humanity to the nineteenth century. Topics include the rise of centralized societies, the Atlantic slave trade, early Christianity and Islam. [4]

AFH 4200 History of Africa II (3). African history from the nineteenth century to the present. Topics include European colonialism, the struggle for independence, and contemporary challenges. [4]

AFH 4405 History of East Africa (3). Surveys the developments in the eastern region of the continent from the origins of humanity in the Rift Valley to the 1994 genocide in Rwanda. [4]

AFH 4450 History of South Africa (3). Examines the development of the South African nation in terms of its African and European heritage from the early Khoisan societies through apartheid and Mandela's election. [4]

AFH 5905 Readings in African History (3). An examination of historiographical traditions within African history. Topics will vary; with a change in theme, the course may be repeated. Prerequisite: Graduate standing.

AFH 5935 Topics in African History (3). An examination of specific themes in African history. Topics will vary. With a change in theme, the course may be repeated. Prerequisite: Graduate standing.

AFH 6915 Research in African History (3). Research in primary and secondary sources on African history. Subjects may vary. May be repeated with departmental approval. Prerequisite: Graduate standing.

AMH 2000 Origins of American Civilization (3). Examines the origins of the United States from the first European settlements through the early republic. Topics include society, culture, politics and economics. Written work meets the state composition requirement (6,000 words).

AMH 2002 Modern American Civilization (3). Examines the development of the United States from the early republic to the present. Topics include society, culture, politics and economics. Written work meets the state composition requirement (6,000 words).

AMH 2010 American History, 1607-1850 (3). A survey of American history from the founding of Virginia to the antebellum era. Analysis of colonial America, the American Revolution, the Constitution, and the growth of a new republic. [3]

AMH 2020 American History, 1850 to the Present (3). A survey of American history from before the Civil War to our own day. Analysis of the Civil War, Reconstruction, the Gilded Age, the move toward imperialism, and the problems of the 20th Century. [3]

AMH 2428 History of Miami (3). The history of Miami and Dade County from the time of the native Americans until today. Students write research papers based on primary sources, as well as archival sources. [3]

AMH 3012 American History, 1600-1763 (3). The American social colonial experience from the earliest settlements at Jamestown and Plymouth to the eve of the American Revolution. Particular emphasis will be on religion, social structure, politics, and slavery. [3]

AMH 3141 American History, 1790-1860 (3). An exploration of early national U.S. History, with particular attention to party politics, religious pluralism, sentimental culture, reform movements, and economic development. [3]

AMH 3270 Contemporary U.S. History (3). An examination of the major trends, forces and personalities that have shaped the recent American past. [3]

AMH 3317 America and the Movies (3). An examination of the social and cultural history of 20th century America through its movies. [3]

AMH 3331 American Intellectual History I (3). This course will trace the origins and development of the main ideas and intellectual themes of Anglo-American history during the colonial and early national period, 1600-1815. It will stress social ideas and popular concepts, and relate them to the formation of dominant American national characteristics. [3]

AMH 3332 American Intellectual History II (3). This course will emphasize the full flowering of individualistic liberalism in 19th Century American thought, and trace the implications of and reaction against this tradition down to the present. [3]

AMH 3444 The Great American West (3). The course will explore the meaning of the West for both the settlers and modern Americans. Using song, film, novels, art, etc., the course will examine the lives and values of the Indians, mountain men, farmers, ranchers, and cowboys. [3]

AMH 4130 The American Revolution (3). An exploration of the nature of the Revolution from the beginning of the conflict in 1763 through the ratification of the Constitution in 1789. Discussion of the political and economic differences between the colonists and England, along with the meaning the war had to the different classes of Americans. [3]

AMH 4140 Age of Jefferson (3). A survey of Jeffersonian America (1790-1828) with emphasis on the origins of American politics, the emerging American economy, the rise of American nationalism, and Jeffersonian mind. [3]

AMH 4160 The Age of Jackson (3). A survey of Jacksonian America (1828-1850) with emphasis on the growth of political parties, the rise of American industry, the emergence of labor, slavery, and early reform movements. [3]

AMH 4170 Civil War and Reconstruction (3). The rise and sources of militant sectionalism in the United States, the war itself, and the restoration of the nation. [3]

AMH 4230 The Roaring Twenties and the Great Depression (3). A political, economic, social, and intellectual history of the 1920s and the great depression of the 1930s. [3]

AMH 4251 The Great Depression (3). This course deals with the experience of the American people in the Great Depression of the 1930s. It examines causes of the depression, government response, and effectiveness of response, as well as looking at the actual daily experience of people during the Depression and the changes it made in U.S. society. [3]

AMH 4292 Origins of Modern America, 1877-1920 (3). U.S. history between the Civil War and World War I, origins of modern American social, cultural, and private life. Impact of industrialization, urbanization, immigration and war on American society, culture between 1877 and 1920. [3]

AMH 4373 Entrepreneurs in U.S. (3). Focusing on entrepreneurism, course covers American ideals (capitalism, individualism, upward mobility, the free market, independence) in historical context. Examines why these ideals have changed, colonial era to the present. [3]

AMH 4400 Southern History (3). An examination of the main themes and social forces that have shaped the southern experience and the southern intellectual tradition in a distinctive way within the larger historical reality of colonial Anglo-America and the United States. The period covered is from initial exploration and settlement of Sir Walter Raleigh and John Smith to the present. [3]

AMH 4421 Florida Under Five Flags: Florida History from Pre-contact to 1877 (3). Overview of Florida from the fifteenth through nineteenth centuries. Examines the changing economic, social, and political position of the peninsula and provides an understanding of how Florida has been shaped by its geography and colonial experience. [3]

AMH 4500 United States Labor History (3). Transformations in the nature of work, the experience of the working class, and the development of the American labor movement, with special attention to issues of race, region, and gender. [3]

AMH 4544 The United States and the Vietnam War (3). Emphasizes the cultural differences between the U.S. and Vietnam, and examines why and how the United States got involved in Vietnam and ended up fighting a major war in Southeast Asia. [3]

AMH 4560 History of Women in the United States (3). The changing dimensions of women's lives from the colonial era of U.S. history to the present. The course will examine the changing economic, social, and political position of women as well as the development of feminist movement and organizations. [3]

AMH 4570 African-American History (3). Black society in the United States and its relation to the political, economic, social, and cultural history of America. [3]

AMH 4571 African American History from the 17th to the late 19th Centuries (3). Examines the experience of African Americans from the colonial period to the Reconstruction era. Topics include: slave cultures; development of free black communities; civil war. [3]

AMH 4573 African American History from the Late 19th Century to the Present (3). Examines the experience of African Americans from the emergence of Jim Crow to the Black Power Movement. Topics include the Great Migration, Marcus Garvey, the Civil Rights and Black Power Movements. [3]

AMH 4914 South Florida History: Research (3). A history of South Florida from the Tequestas and Calusas to the present. The main focus is student research using primary sources including manuscript censuses, microfilmed newspapers and archives. [3]

AMH 4930 Topics in U.S. History (3). Selected topics or themes in U.S. history. The themes will vary from semester to semester. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). [3]

AMH 5905 Readings in American History (3). Students read books from different historiographical traditions and with conflicting interpretations about an important subject in American history. Subjects will vary according to professors. Course may be repeated with departmental approval. Prerequisite: Graduate standing.

AMH 5935 Topics in American History (3). An examination of specific themes or topics in American history. The theme will vary from semester to semester. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule.) Prerequisite: Graduate standing.

AMH 6915 Research in American History (3). Students conduct research in primary and secondary sources on aspects of important subjects in American History. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate standing.

EUH 2011 Western Civilization: Early European Civilization (3). Examines the earliest development of European Civilization; European thought and behavior in pre-classical, classical and post-classical periods. Written work meets state composition requirement (6,000 words).

EUH 2021 Western Civilization: Medieval to Modern Europe (3). Examines key developments of European civilization from medieval to early modern times. Written work meets state composition requirement (6,000 words).

EUH 2030 Western Civilization: Europe in the Modern Era (3). Examines key developments in the origins and nature of contemporary Europe, including social, political and industrial changes from the early modern period to the present. Written work meets the state composition requirement (6,000 words).

EUH 3120 Europe in the Central Middle Ages (3). Europe from the ninth to the twelfth centuries, analyzing the disintegration of the empire of Charlemagne and its replacement by nascent national states and by the supra-national papal monarchy. [1]

EUH 3121 Europe in the Earlier Middle Ages (3). The disintegration of the Roman imperial unity and its replacement by Latin, Greek and Arabic cultural spheres, with particular emphasis on the Latin West. [1]

EUH 3122 Europe in the Later Middle Ages (3). The thirteenth throughout the fifteenth centuries as the prelude to the revolutionary transformations of early modernity e.g., secularization, industrialization, expansionism, scientism and democratization [1].

EUH 3142 Renaissance and Reformation (3). A study of the development of humanism in Italy and Protestantism in Germany, and their impact on Europe in the Fourteenth, Fifteenth, and Sixteenth centuries. [2]

EUH 3181 Medieval Culture (3). Selected topics in the cultural history of Europe from 500 to 1500: epic and knightly romance; Christian theology and spirituality; scholastic philosophy; Romanesque and Gothic arts; the rise of literature in the vernacular; the culture of the layman; and the contribution of women. [1]

EUH 3205 Nineteenth-Century Europe 1815-1914 (3). This course will deal with the political, diplomatic, economic, social, and cultural history of Europe from 1815 until 1914. Special attention will be given to the Industrial Revolution. [2]

EUH 3245 European History, 1914-1945 (3). Europe in the era of the two World Wars, with special emphasis on communism and fascism. [2]

EUH 3282 European History, 1945 to Present (3). Europe since the Second World War examined in its political, diplomatic, social, economic, and cultural aspects. [2]

EUH 3400 Greek History (3). The origins of the Greek polis in Mycenaean times, its domination of civilization in the first millennium B.C., its transformation under Alexander and his successors. The political history, culture, values, and social dynamics of Greek civilization. [1]

EUH 3411 Ancient Rome (3). The formation of the Roman republic; its rise to domination in the Mediterranean, its transformation into the Roman Empire, and its final disintegration. The political history, culture, values, social dynamics, and enduring force of the Roman civilization. [1]

EUH 3570 Russian History (3). An overview of Russian History from the time of tribal Slavs until today. The course will focus especially on the changing conditions of the Russian peasantry and on the unique development of the Russian state. [2]

EUH 3576 The Russian Revolution and the Soviet Union (3). This course deals with Russia since 1917 and focuses particularly on the theory and practice of communism in the Soviet Union. The impact of communism on the lives of the people, whether in politics, economics, or culture, will be examined. [2]

EUH 3611 European Cultural and Intellectual History (3). This course will examine the development of the key ideas in European political and social theory, in conceptions of the natural world and of the individual which have come to dominate European culture in the last four hundred years. [2]

EUH 4025 Saints, Relics and Miracles in Medieval Europe (3). Synthetic view of medieval Europe through the lens of saints veneration. Topics include saints as patrons, miracles and magic pilgrimage, bureaucratic canonization, gender and mysticism. [1]

EUH 4033 Nazism and the Holocaust (3). The history of the Third Reich and the Holocaust. The development of the german State and the emancipation of the Jews; the rise of racial antisemitism; Hitler and the emergence of Nazism as a political force; the 'Final Solution' and European and American responses. [2]

EUH 4123 Medieval Holy War (3). Analysis of the cross-cultural phenomenon of holy warfare or the sanctification and glorification of militarism in the Christian crusader movement and the Islamic *jihad*. [1]

EUH 4187 Topics in Medieval European History (3). Selected topics or themes in Medieval history. The themes will vary from semester to semester. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). [1]

EUH 4200 Seventeenth Century Europe (3). A thematically-arranged study of social, political and artistic developments, in the 17th century. Concentrates on the 30 years war,

absolutism, rural society, scientific revolution, and Baroque art. [2]

EUH 4286 Topics in European History (3). An examination of selected topics or themes in early modern and modern European history. The themes will vary from semester to semester. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). [2]

EUH 4300 Byzantine History (3). A survey of the political, cultural, and social history of the Byzantine Empire from 284 to 1461, including Byzantium's contributions to Christian theology, Roman law, and the culture of the Renaissance and eastern Europe. [1]

EUH 4313 History of Spain (3). A survey of Spanish history from the Reconquista through the Civil War, with particular emphasis on the Golden Age. [2]

EUH 4401 History of Fifth Century Greece (3). An examination of the culture and history of Greece in the age of Herodotus and Thucydides, of Pericles, Aeschylus, Euripides, and Aristophanes. [1]

EUH 4432 Between Empire & Renaissance: Italy in the "Middle Age" (3). The Italian peninsula between the age of Roman imperial dominance and the rebirth of Italian centrality during the "Renaissance." Greek, Germanic, Muslim and Norman intervention and the political role of the Roman Church. [1]

EUH 4440 The Making of Medieval France (3). A survey of French history as a case study in state building from the Celtic period and the incorporation of the region into the Roman empire as Gaul to the reign of Philip Augustus. [1]

EUH 4451 History of Modern France, 1815-1968 (3). Survey of French history form the restoration through the student revolt of May 1968, with attention to questions of change and continuity in the French response to modernity. [2]

EUH 4453 The French Revolution and Napoleon (3). A study of French and European history from 1798 to 1815, with an emphasis on the political development of the Revolution, social groups within France, and the rise of Napoleon. [2]

EUH 4462 History of Modern Germany, 1815-1945 (3). A survey of German history from the unification movement through WWII. Topics discussed include Hitler's relation to the German past, liberalism, modernization. [2]

EUH 4501 England to 1688 (3). A survey of ancient, medieval and early modern English history with attention to continental comparisons and contrasts. [1]

EUH 4520 England in the 18th Century (3). Exploring one of the greatest eras in English history, this course will cover the growth of the British empire, crown and Parliament, the industrial revolution, social problems and English culture. [2]

EUH 4542 The Culture and Society of Britain, 1830-Present (3). An exploration of the rise and fall of Britain as an industrial, imperial nation. Topics include the nature of industrialization and class formation, the role of race and gender in British culture and society, war and the loss of empire in the 20th century. [2]

EUH 4600 Key Texts in Western Culture to the Renaissance (3). The history of Western Civilization from its beginning to the Renaissance, studied through particularly significant texts. [1]

EUH 4602 The Enlightenment (3). This course deals with the French Enlightenment of the Eighteenth Century, particularly with Voltaire, Diderot, and Rousseau. Impact of the Scientific and English Revolutions on Enlightenment. [2]

EUH 4606 Key Texts in Western Culture from the Reformation to the 20th Century (3). The history of Western Civilization from the Reformation to the present, studied through particularly significant texts. [2]

EUH 4610 Women and Gender in Europe, 1750-Present (3). Examines how women contributed to the development of modern European history. Also explores how ideas about gender and sexuality shaped, and were influenced by, the nature of politics, economics and culture. [2]

EUH 4613 Social History of Early Modern Europe (3). Examines European history 1300-1800 through discussion of various topics including: lords, peasants, demography, family life, education, witchcraft. [2]

EUH 4660 Modern Europe, 1789-Present (3). European history from the French Revolution until today, with special attention to liberalism, nationalism, socialism, communism, and fascism. The course will touch on the main points of the national histories of the various European states, from Britain to Russia. [2]

EUH 4953 Czech History and Culture – Study Abroad (3). Covers the major historical forces and movements which have shaped this area of the world, especially in the last 150 years. The course is taught by FIU and Czech faculty. Prerequisite: Permission of the instructor. [2]

EUH 5905 Readings in European History (3). Students read books from different historiographical traditions and with conflicting interpretations about an important subject in European history. Subjects will vary according to professors. Course may be repeated with departmental approval. Prerequisite: Graduate standing.

EUH 5935 Topics in European History (3). An examination of specific themes or topics in European history. The theme will vary from semester to semester. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). Prerequisite: Graduate standing.

EUH 6915 Research in European History (3). Students conduct research in primary and secondary sources on aspects of important subjects in European History. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate standing.

HIS 3308 War and Society (3). An examination of the ways societies have organized themselves for external and internal wars. The course will also explore the changing conduct of war, the image of the warrior, and the ways in which military institutions have crystalized class structures.

HIS 4400 The Formation of Urban Society (3). A comparative study of the cultural, social, political and economic development of cities. Topics include: the ancient city, industrialization, immigration, poverty and urban planning.

HIS 4454 The History of Racial Theory in Europe and the United States (3). The literature produced by natural and social scientists on the

question of race, the shifting notions of racial identity and difference, superiority and inferiority, and the political and social consequences of these ideas. [2,3]

HIS 4908 Independent Study (VAR). Individual conferences, assigned readings and reports on independent investigations, with the consent of the instructor.

HIS 4930 Special Topics (3). An examination of specific themes or topics in history. The theme will vary from semester to semester. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule).

HIS 4935 Senior Seminar (3). A seminar to be taken by all history majors, to provide experience in research, writing, and critical analysis.

HIS 5289 Comparative History (3). A study of specific topics in history that cut across regional, national, and chronological lines. The topics will change from semester to semester, and with a change in content, the course may be repeated. (The topic of the course will be announced in the yearly schedule). Prerequisite: Graduate standing.

HIS 5908 Independent Study (VAR). Individual conferences, assigned readings and reports on independent investigations, with the consent of the instructor. Prerequisite: Graduate standing.

HIS 5910 Advanced Research Seminar (3). Small group sessions will analyze particular subject areas in history, with the consent of the instructor. Prerequisite: Graduate standing.

HIS 5930 Special Topics (3). An examination of specific themes or topics in history. The theme will vary from semester to semester, and with a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). Prerequisite: Graduate standing.

HIS 5940 Supervised Teaching (1-3). The students will work under the close supervision of a regular member of the faculty in a mentorial fashion. The supervision will cover various aspects of course design and delivery in History. Prerequisite: Graduate standing.

LAH 2020 Latin American Civilization (3). An analysis of the underlying themes that have shaped the history of the Ibero-American areas from the time of initial contact to the present. Emphasis is given to cultural exchange and transformation. Written work meets state composition requirement (6,000 words).

LAH 3132 The Formation of Latin America (3). An examination of Latin America in the colonial period, focusing on conquest, Indian relations, the landed estate, urban functions, labor, and socioeconomic organization from the 15th through the 18th Centuries. [4]

LAH 3200 Latin America: The National Period (3). Trends and major problems of Latin American nations from independence to the present. [4]

LAH 3450 Central America (3). An overview of Central American history from colonial times to the present, with emphasis on the period after the mid-Eighteenth Century. All five modern nations are dealt with in some detail, while the thematic focus is on social and economic history. [4]

LAH 3718 History of U.S.-Latin American Relations (3). Surveys the history of the social, economic and political relations between the U.S. and the countries of Central America, South America, and the Caribbean basin during the last two centuries. [4]

LAH 3740 Comparative History of Latin American Rebellions and Revolutions (3). Identifies the historical forces driving revolutionary change in Latin America. Causes of revolutions, directions of the revolutionary movements, and their political agendas. [4]

LAH 4433 Modern Mexico (3). An examination of the central themes of nation-building in Mexico from 1810 to the present: race, land, political authority, regionalism, dictatorship, and the Mexican Revolution. [4]

LAH 4471 Colonial Caribbean in Comparative Perspective (3). An overview of the Caribbean region from the fifteenth through the nineteenth centuries. Examines the changing economic, social, and political position of the area and provides an understanding of how the colonies have been shaped by their experiences. [4]

LAH 4482 Cuba: 18th - 20th Centuries (3). The socio-economic and political setting in Cuba since the mid-Eighteenth Century. [4]

LAH 4511 Argentina: 18th - 20th Centuries (3). A survey of the social and political formation of the Argentine nation, starting with the colonial legacy and ending with the contemporary political situation. [4]

LAH 4600 History of Brazil (3). Origins of Portuguese rule and African slavery; crisis of colonialism and transition to independence; coffee, abolition, and the Brazilian Empire; Republican Brazil and the Revolution of 1930; postwar developments. [4]

LAH 4720 Family and Land in Latin American History (3). Evolution of land tenure in Latin American societies and its connections with the strategies and interests of elite families. [4]

LAH 4721 History of Women in Latin America (3). Examines women's roles in indigenous societies, in the colonial period, during independence, and in the 19th century. Also explores women and slavery, populism and popular culture, and the rise of the feminist movement. [4]

LAH 4750 Law and Society in Latin American History (3). Social history of law and legal struggles by colonial Indians, black slaves, peasants, women and contemporary "colonos" (settlers). Its emphasis is on the prevalence of legal confrontations throughout Latin American History. [4]

LAH 4932 Topics in Latin American History (3). Selected topics or themes in Latin American history. The themes will vary from semester to semester. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). [4]

LAH 5905 Readings in Latin American History (3). Students read books from different historiographical traditions and with conflicting interpretations about an important subject in Latin American history. Subjects will vary according to professors. Course may be repeated with departmental approval. Prerequisite: Graduate standing.

LAH 5935 Topics in Latin American History (3). An examination of specific themes or topics in Latin American history. The theme will vary from semester to semester. With a change in theme, the course may be repeated. (The theme will be

announced in the yearly schedules.) Prerequisite: Graduate standing.

LAH 6915 Research in Latin American History (3). Students conduct research in primary and secondary sources on aspects of important subjects in Latin American History. Subjects will vary according to professor. Course may be repeated with departmental approval. Prerequisite: Graduate standing.

WOH 2001 World Civilization (3). Comparative histories of major world civilizations, including China, India, the Moslem Middle East, Africa, Latin America, and the West. Emphasis on cultural characteristics and interactions. Written work meets state composition requirement (6,000 words).

WOH 3281 Jewish History to 1750 (3). Jewish history from the First Exile in 586 BCE to 1750. The development of Jewish institutions in exile and as a nation, the development of the Talmud and the medieval experience.

WOH 3282 Modern Jewish History (3). A survey of the major currents in modern Jewish History. The reaction to the Enlightenment, the American experience, the growth of the Eastern European Shtetl, the Holocaust and the Birth of the State of Israel.

Humanities

Kenneth F. Rogerson, *Philosophy, Director of Humanities*
Marian Demos, *Associate Professor, Modern Languages (Classics)*
Fernando Gonzalez Reigosa, *Associate Professor, Psychology and Dean, Honors College*
Eric Leed, *Professor, History*
Ramon Mendoza, *Professor, Modern Languages*
Joyce Peterson, *Associate Professor, History, and Associate Dean of the College*
Richard P. Sugg, *Professor, English*
Barbara Watts, *Associate Professor, Visual Arts*

Bachelor of Arts in Humanities

Degree Program Hours: 120

The Humanities program offers a structured interdisciplinary curriculum designed to confront the student with values and issues concerning human beings and society, extending beyond the scope and methodology of natural and social sciences.

The program focuses primarily upon the human condition, human values, changing views of the world, and society's major concerns. These values, world views, and concerns have been the preferred object of thought and creativity of philosophers, poets, playwrights, fiction writers, artists, mystics and religious thinkers. Their views have become the reservoir of humankind's most outstanding intellectual achievements, and they have also been powerfully expressed in the works of painters, sculptors, and film directors, as well as in other productions of mass media and popular culture, which must now engage the serious student of our culture and its future. The program also pays particular attention to non-Western and American ethnic-minority cultures, in order to expose the student to the different values, world views, and outstanding cultural achievements of these cultures.

For those students particularly interested in Classical Greek and Roman culture, the program offers a well-structured Classical track and a sequence of Greek and Latin courses.

The Humanities program is not only theoretical. It seeks to develop in the student those skills and attitudes which are specifically human, such as skills of verbal and written communication, analytical skills, open-minded and critical attitudes towards the problems of our changing society, artistic sensitivity and expression, and all forms of imaginative creativity. Above all, the program hopes to challenge the student to raise the cultural level of our society by bringing his or her humanistic approach to bear upon institutions, cultural programs, mass media, and the business community.

The Humanities program is not only a richly rewarding program of undergraduate study, but it also prepares students for later success in post-graduate programs in the liberal arts, law school, business, and public affairs.

A Humanities double major is a fine complement to a highly specialized vocational or professional major. In addition, a Humanities minor offers an attractive option both to students in arts and sciences and to those in the other schools of the University.

Lower Division Preparation

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Common Prerequisites

No specific courses required; all students are encouraged to complete the Associate in Arts degree.

Upper Division Program (30)

A. Core: The following 4 courses are required from all HUM majors (12 credit hours):

HUM 4431	The Greek World[1]
HUM 3232	Renaissance and Baroque
HUM 4920	Humanities Seminar[1]

and one of the following courses:

HUM 3246	The Enlightenment and the Modern World
HUM 3254	Contemporary World
HUM 3252	20th Century Culture and Civilization

Note: For students who take more than four core courses, the surplus can be counted under B or C below.

B. Three additional Humanities courses (9 credit hours):

HUM 3214	Ancient Classical Culture and Civilization
HUM 3304	Values in Conflict
HUM 3225	Women, Culture and History
HUM 3306	History of ideas
HUM 3432	The Roman World
HUM 3435	The Medieval World
HUM 2512	Art and Society[1]
HUM 3514	Art in Context
HUM 3545	Art and Literature
HUM 3562	Politcis of the Arts[1]
HUM 3591	Art & Technology[1]
HUM 3930	Female/Male: Women's Studies Seminar
HUM 3939	Special Topics[1]
HUM 4391	Human Concerns[1]
HUM 4406	Film and the Humanities
HUM 4491	Cultural Heritages and Changes[1]
HUM 4543	Literature and Philosophy
HUM 4544	Literature and the Humanities
HUM 4561	Ethics and the Humanities
HUM 4555	Symbols and Myths
HUM 4906	Independent Study[1]

C. Three additional courses either from the list of HUM courses offered by the Program; or from the following Humanities disciplines: History, Philosophy, Religion, Art History, and Literature; or from other disciplines related to the Humanities if approved by Humanities faculty student advisers. (9 credit hours)

D. General Electives (30 semester hours): These courses may be outside of the Humanities and its contributing disciplines. Courses must be approved by the Program Director.

[1]With a change in theme and the instructor's permission, these courses may be repeated for credit.

Classics Track

a. Humanities Core Curriculum 12

b. Three additional courses dealing with Classical (Greek or Roman) culture and civilization. These courses may be either HUM courses or courses from contributing Humanities disciplines. 9

c. Three interdisciplinary Humanities (HUM) courses. 9

d. Language requirement: The language requirement is the same as for other FIU students; however, students in the Classics Track are strongly encouraged to satisfy the requirement with a Classical language.

e. General Electives (30 semester hours). These courses may be outside of the Humanities and its contributing disciplines. Courses must be approved by the Program Director.

Minor in the Humanities (15)

1. One of the following:

HUM 3214	Ancient Classical Culture and Civilization

or

HUM 4431	The Greek World	
	or	
HUM 3432	The Roman World	
	and	
2. Four additional HUM courses (including classical languages)		12

Course Descriptions

Definition of Prefixes

HUM-Humanities

GRE 1120 Classical Greek I (5). Emphasis of grammar, and on basic reading and writing skills.

GRE 1121 Classical Greek II (5). Emphasis on grammar, and on basic reading and writing skills. Prerequisite: GRE 1120.

GRE 2200 Intermediate Classical Greek (5). Emphasis on grammar, and on acquiring intermediate reading and writing skills. Prerequisite: GRE 1121.

GRW 3210 Greek Prose Writers (3). Translation into English and grammatical analysis of selected texts of Classical prose writers, such as Plato, Aristotle, Xenophon, Thucydides and Plutarch. Prerequisite: Reading knowledge of Classical Greek or GRE 2200.

HUM 2512 Art and Society (3). A study of the relationship between art and culture in different periods, including patronage, the role of the artist, and the relationship between art and economic, political, religious, and ideological forces.

HUM 2701 Study Abroad in the Humanities (1-9). Integrated study of painting, architecture, music, drama, dance, and philosophy. Attitudes and beliefs of societies as they are reflected in the arts.

HUM 3214 Ancient Classical Culture and Civilization (3). Explores the culture of the ancient Greek and Latin worlds from an interdisciplinary perspective and studies the varied conceptions of the individual, society, and nature.

HUM 3225 Women, Culture and History (3). Examines women's lives within various world cultures and historical periods. Examines the cultural meaning attributed to women, women's lived experiences and historical contributions.

HUM 3232 Renaissance and Baroque Cultures (3). An in-depth examination of the cultural monuments of the Renaissance, Reformation, Counter-Reformation, and Baroque periods and of the forces that helped shape them.

HUM 3246 The Enlightenment and the Modern World (3). Explores the culture and the Enlightenment and the modern world from an interdisciplinary perspective and studies the varying conceptions of the individual society and nature.

HUM 3252 20th Century Culture and Civilization (3). The 20th century through the Vietnam war, as represented by the period's creative and intellectual works in literature, art, history and philosophy - discussed from an interdisciplinary perspective.

HUM 3254 The Contemporary World (3). Significant creative and intellectual works, ideas and movements of the last twenty years surveyed and discussed from an interdisciplinary perspective.

HUM 3304 Values in Conflict (3). Philosophical, ethical, and religious foundations of Western civilization and significant challenges its value system has received from critical and revolutionary thought.

HUM 3306 History of Ideas (3). The historical development of fundamental concepts through an interdisciplinary cultural approach. Nature, freedom, beauty, virtue, alienation, and relativism are traced in literature, art, and philosophy including the social context of developing ideas.

HUM 3432 The Roman World (3). An in-depth examination of selected cultural monuments and events of the Roman Republic and Empire and of the forces that helped shape them.

HUM 3435 The Medieval World (3). An in-depth examination of cultural monuments of the European Middle Ages and of the forces that helped shape them.

HUM 3514 Art in Context (3). Examines topics concerning art in the context of the history and culture of a particular society (with change in content and consent of the instructor, this course may be repeated for credit). Prerequisite: Junior standing.

HUM 3545 Art and Literature (3). A study of a period in the history of visual art as it relates to literature. Topics may include art and mythology, sacred and profane love in art and literature, painting and poetry, and the novel and art.

HUM 3562 Politics and the Arts (3). Explores arts and patronage in relation to the politics and ideologies of a given place and time. Topics vary. May be repeated with a change in content.

HUM 3591 Art and Technology (3). Explores the relationship between innovations in technology and artistic expression. Course theme is media based, and varies from semester to semester. May be repeated with department approval.

HUM 3930 Female/Male: Women's Studies Seminar (3). This course interprets and contrasts the status of women and men in context with women's inequality. Diverse topics include the workplace, family, education, image, violence and ethnicity.

HUM 3939 Special Topics (3). An examination of specific topics in the humanities. The topics may vary from semester to semester. May be repeated with a change in content.

HUM 3949 Cooperative Education in Humanities (3). A student majoring in Humanities may spend one or two semesters fully employed in industry in a capacity relating to the major.

HUM 4392 Human Concerns (3). Examines concerns important to the human condition, including varying conceptions of human nature, the relation of the individual to society, the quest for identity, the search for meaning through literature, art and social institutions. (With consent of the instructor, this course may be repeated for credit).

HUM 4406 Film and the Humanities (3). Studies the significance of film in Western culture: the language, semiotics and technique of films with the aid of appropriate cinematographical material.

HUM 4431 The Greek World (3). An in-depth examination of selected cultural monuments and events of the Greek World in the Classical and Hellenistic periods and of the forces that helped shape them.

HUM 4491 Cultural Heritages and Cultural Changes (3). Focuses upon various cultures and their development, including such topics as: cultural evolution and revolution, ethnicity and pluralism, and subcultures and countercultures. (With consent of the instructor, this course may be repeated for credit.)

HUM 4543 Literature and Philosophy (3). The interpretation of literature and philosophy from an interdisciplinary perspective. In addition to philosophical novels, poetry, and drama, the course may examine philosophical scrutiny of literature.

HUM 4544 Literature and the Humanities (3). Literature from an interdisciplinary perspective. Literary texts are related to the cultural context of their production and the ideas surrounding them.

HUM 4555 Symbols and Myths (3). An in-depth examination of mythology and symbolic language within the cultural and psychodynamic forces that inform them. This course gives special emphasis to Classical myths.

HUM 4561 Ethics and the Humanities (3). Human values studied from an interdisciplinary perspective. Selected ethical issues are examined using philosophical, historical, or literary texts. The relationship between ethical values and cultural achievements is explored.

HUM 4920 Humanities Seminar (3). Addresses a specific topic in-depth from a variety of perspectives. Topics will be announced in advance. (With consent of the instructor, this course may be repeated for credit.)

HUM 5935 Graduate Seminar in Humanities (3). A specialized thematic topics offered at the Graduate level. Topics will vary and will be announced in advanced. With consent of the instructor, this course may be repeated for credit.

LAT 1120 Latin 1 (5). Emphasis on grammar and on acquiring basic reading and writing skills.

LAT 1121 Latin 11 (5). Emphasis on grammar and on acquiring reading and writing skills. Prerequisite: LAT 1120.

LAT 2200 Intermediate Latin (5). Emphasis on grammar and on acquiring basic reading and writing skills. Prerequisite: LAT 1121.

LAT 3210 Latin Prose Writers (3). Translation into English and grammatical analysis of selected texts of classical prose writers such as Cicero, Caesar and Livy. Prerequisite: Reading knowledge of Latin or LAT 2200.

International Relations

Damian J. Fernandez, *Associate Professor and Chairperson*
Ken I. Boodhoo, *Associate Professor*
Thomas A. Breslin, *Associate Professor*
John F. Clark, *Associate Professor*
Ralph S. Clem, *Professor*
Emily Copeland, *Assistant Professor*
Peter R. Craumer, *Associate Professor*
Francois Debrix, *Assistant Professor*
Gail Hollander, *Visiting Instructor*
Antonio Jorge, *Professor*
Paul Kowert, *Assistant Professor*
Charles G. MacDonald, *Professor*
Felix Martin, *Assistant Professor*
Carmelo Mesa-Lago, *Visiting Professor*
Mohiaddin Mesbahi, *Associate Professor*
Rod Neumann, *Associate Professor*
Nicholas G. Onuf, *Professor*
Patricia L. Price, *Assistant Professor*
Elisabeth Prugl, *Associate Professor*
Susan E. Waltz, *Professor*
Gregory B. Wolfe, *Professor*

Bachelor of Arts

Degree Program Hours: 120

Lower Division Preparation

Students may begin taking courses in the Department at any time and may declare their intention to major in International Relations after completing 24 semester hours of general education requirements. To qualify for full admission to the program, FIU students must have met all lower division requirements including CLAST, complete 60 semester hours, and must be otherwise acceptable into the program.

Common Prerequisites

None

Required for the degree:

INR 2001	Introduction to International Relations	

Upper Division Program

International Relations majors must complete a minimum 30 semester hours of course work in the department with a grade of 'C' or better.

Core Requirement: (9)

GEA 2000	World Regional Geography	3
INR 3013	Development of International Relations Thought	3
INR 4603	Theories of International Relations	3

Group I Courses for the Major: (9)

In addition to the Core Requirement, INR majors must take at least one course (3 sem. hrs.) from each of the following divisions in Group I:

(1)International Law/International Organizations (IL)
(2)Foreign Policy/Security Studies (FP)
(3)International Political Economy/Economic Geography (IPE)

Group II Courses for the Major: (12)

INR majors must also take at least four courses (12 sem. hrs.) in Group II, including at least one from each of the following divisions:

(1) Area Studies (AS)
(2) Geography (G)
(3) Issues and Problems in International Relations (IP)

Electives

Students are encouraged to take courses or pursue a minor in related fields such as economics, modern languages, geography, history, political science, sociology/anthropology, or business. We particularly recommend that students take introductory courses in economics and gain fluency in a foreign language. Students may also consider appropriate academic certificates such as the Latin American and Caribbean Studeis, Asian Studies, African-New World Studies, and European Studies Certificates. Students may want to consider a double major.

Minor in Geography

A student majoring in another academic discipline earns a Minor in Geography by successfully completing approved course work of 15 semester hours with a grade of 'C' or better as described below:

GEO 2000	Introduction to Geography	3
GEA 2000	World Regional Geography	3

In addition to the above required courses, students must take a minimum of three other Geography courses, at least one with a GEA prefix, and at least one with a GEO prefix.

Minor in International Relations

A student majoring in another academic discipline earns a Minor in International Relations by successfully completing approved course work of 15 semester hours in the Department of International Relations with a grade of 'C' or better. This program must include:

INR 2001	Introduction to International Relations	3
GEA 2000	World Regional Geography	3
At least one course from Group I		3
At least one course from Group II		3
Any other course offered by the Department of International Relations.		

Course Descriptions

Definition of Prefixes

GEA-Geography-Regional (Area); GEO-Geography-Systemic; INR-International Relations; PUP-Public Policy.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

GEA 2000 World Regional Geography (3). A systematic survey of the major regions and countries of the world, with regard to their physical, cultural, and political characteristics. Emphasis upon climate, natural resources, economic development, and population patterns. (F,S,SS)

GEA 3320 Population and Geography of the Caribbean (G) (3). Physical, cultural and political geography of the Caribbean; emphasis on population patterns, growth and ethnicity. (S)

GEA 3400 Population and Geography of Latin America (G) (3). Introduction to the physical, cultural, and political geography of Latin America. Emphasis on population patterns and problems of population growth, systems of land use and tenure, economic development, natural resources, and agriculture. (F,S)

GEA 3500 Population and Geography of Europe (G) (3). Introduction to the physical, cultural, and political geography of Europe emphasizing the evolution of the states and the geographical factors facilitating the integration movement. (S)

GEA 3554 Geography of Russia and Central Eurasia (G) (3). A geographical analysis of the countries of the former Soviet Union. Emphasis on resources, population, union urbanization, and economic development. (S)

GEA 3600 Population and Geography of Africa (G)(3). Examines the structure of pre-conquest society and covers colonialism's effects on contemporary food production and ecological management. An overview of development issues in Africa. (F)

GEA 3635 Population and Geography of the Middle East (G) (3). Introduction to the physical, cultural, and political geography of the Middle East. Emphasis on population patterns, natural resources, and economic development. (F)

GEA 4905 Independent Study (1-6). Directed independent research in regional geography. Requires prior approval by instructor. (F,S,SS)

GEO 2000 Introduction to Geography (G) (3). Leading concepts of human and environmental geography. Physical, cultural, economic and political factors in the spatial patterns of natural and human systems. (F,S)

GEO 3421 Cultural Geography (G) (3). The study of spatial variations among cultural groups and the special functioning of society. Focuses on describing and analyzing geographic differences in language, religion, economy, and government. (S)

GEO 3471 Political Geography (G) (3). Emphasis is given to man's organization of space, particularly as it pertains to the nation-state. Factors instrumental to determining the viability of states are included stressing unifying-repelling forces. (S)

GEO 3502 Economic Geography (G, IPE) (3). Explores spatial facets of the economy at the international level, including trade, development, manufacturing, multinational corporations and technology. (S)

GEO 3602 Urban Geography (G) (3). The study of spatial organization within and among urban settlements. Analysis of both the empirical and theoretical aspects of urbanism are covered, with an emphasis on current urban problems. (S)

GEO 4905 Independent Study (1-6). Directed independent research in systematic geography. Requires prior approval by instructor. (F,S,SS)

GEO 5415 Topics in Social Geography (G, IP) (3). Topics discussed include geographic aspects of population and ethnicity, with emphasis on sources and analysis of data and pertinent concepts. Prerequisite: GEA 2000 or permission of the instructor. (S)

INR 2001 Introduction to International Relations (3). Introduction to the interactions among international actors: states, international organizations, and transnational groups. Concepts such as power and national interest will be introduced. (F,S,SS)

INR 3004 Patterns of International Relations (IP) (3). The course deals with the development and practice of key concepts of international relations as seen in the historical perspective of the 19th and 20th centuries. The course is structured so as to emphasize the continuity and coexistence of the several concepts during the 20th century, and to provide an outline of modern diplomatic history. (F,S,SS)

INR 3013 Development of International Relations Thought (3). The nature and characteristics of international relations from antiquity to the end of the First World War. Examination of the religio-philosophical, socio-economic and political ideas and systems associated with them. Study of select historical occurrences and patterns of social change and their interaction with the dynamics of international relations. Prerequisite: INR 2001.

INR 3043 Population and Society (G, IP) (3). Introduction to basic demographic concepts: fertility, mortality, migration, urbanization. Discussion of economic development, modernization and population change. Examination of sources of data and background information including censuses and vital statistics, and their utilization. (F)

INR 3045 The Global Challenge of Refugees and Migrants (IP) (3). Examines political and economic challenges stemming from the international movement of refugees and economic migrants. Emphasizes the role of state power, organizations and law in structuring responses.

INR 3081 Contemporary International Problems (IP) (3). Examines selected world and regional issues and problems. Topics vary according to the instructor. (F,S,SS)

INR 3106 International Relations of the United States (FP) (3). Introduces major issues of U.S. foreign policy. Topics are examined from multiple perspectives, including those of individual leaders, domestic interest groups, and the national interest. (F,S)

INR 3206 Foreign Policymaking (FP) (3). Introduces and explores models of foreign policymaking, applied to international strategic, economic, and social problems.

INR 3214 International Relations of Europe (AS) (3). An examination of the international, social, economic, and political life of contemporary Europe. Emphasis given to international organizations and the trend toward economic and political integration. (F,S)

INR 3223 Japan and the United States (AS) (3). Examines the international relationship between two of the most powerful and economically significant states of this and the next century and the international problems they must face together.

INR 3224 International Relations of East Asia (AS) (3). Examines strategic and economic aspects of international relations among China, Japan, North Korea, and other nations of East Asia.

INR 3226 International Relations of Central Asia and the Caucasus (3). Analysis of international relations of Central Asia and the Caucasus, domestic and external sources of region's foreign policy and its geopolitical, geoeconomic and geocultural dynamics.

INR 3232 International Relations of China (AS) (3). An examination of the development of China's international relations in the 20th century. Special attention to the development of institutional mechanisms for diplomacy and to problems of integrating domestic and foreign policies. (S)

INR 3243 International Relations of Latin America (AS) (3). An examination of international, social, economic, and political life of Latin America. Emphasis given to the role of international organizations; regionalism; and the trend toward economic integration. (F,S,SS)

INR 3246 International Relations of the Caribbean (AS) (3). An examination of the international social, economic, and political life of the Caribbean. Includes English, Spanish, and French speaking regions. (F,S)

INR 3252 International Relations of North Africa (AS) (3). An examination of the social, political and economic structure of North Africa and the manner in which its historical development has conditioned international relations within and external to the region. (F)

INR 3253 International Relations of Sub-Saharan Africa (AS) (3). An analysis of the international relations of sub-Saharan African nations with one

another and with other, non-African nations. Examines the effects of such international relationships on development, politics, and social change in sub-Saharan Africa.

INR 3262 International Relations of Russia and the Former USSR (AS) (3). Analysis of the international relations of countries of the former USSR, covering the Soviet and post-Soviet eras. Emphasis on Russia, Muslim Central Asia, and their impact on the international system. (F)

INR 3274 International Relations of the Middle East (AS) (3). An examination of the international social, economic, and political life of the Middle East. The role of oil in the region will receive special attention. (F,S)

INR 3403 International Law (IL) (3). Introduction to the legal concepts, framework, and institutions which play a role in international relations theory and practice. (F,S,SS)

INR 3502 International Organizations (IL, IP) (3). The study of international political, economic, and social organizations and their impact upon the relations between nations. Emphasis on the constitution, voting, membership, security and operation of such organizations, and the settling of international disputes through these bodies. (F,S,SS)

INR 3703 International Political Economy (IPE) (3). Explores the important concepts, theories, and contending approaches used in the study of international political economy.

INR 3705 Geography of Central Asia and the Caucasus (AS) (G) (3). Geography of the countries of the former Soviet Union in the Caucasus and the Central Asian regions. Emphasis on natural resources, environmental problems, ethnicity and population change, urbanization, and economic develop-ment.

INR 3949 Cooperative Education in Social Sciences (3). A student majoring in one of the Social Sciences (Economics, International Relations, Political Science, Sociology, or Psychology) may spend several semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department. (F,S,SS)

INR 4024 Ethnicity and Nationality: World Patterns and Problems (IP) (3). A systematic survey of multinational states and their current political and socio-economic situations. The concept of ethnicity and its correlates. Conceptual bases of ethnic integration, assimilation, and stratification. The macro and micro-scales; country, region, city, neighborhood. The consequences of modernization and economic development. (F)

INR 4032 Asia and Latin America in World Affairs (3). Examines the linkages between Asia and Latin America, their roles in world affaris, the domestic sources of foreign policies of states in the two regions, as well as the international issues confronting the two areas.

INR 4044 World Population Problems (IP) (3). Analysis of problems of population growth, economic development, and food supply. The impact of population growth upon the world political system. The Green Revolution and its implications. Environmental conseq-uences of population growth. Prereq-uisite: INR 3043. (F)

INR 4054 World Resources and World Order (IP) (3). An examination of the impact of the quantity and distribution of the world's resources upon the relations between nations. The availability of mineral resources and food, in particular, will receive attention; and an assessment will be made of the international economic and political implications deriving therefrom. (F,S)

INR 4082 Islam in International Relations (IP) (3). Analysis of the role of Islam in shaping the dynamics of contemporary international relations. Emphasis on ideological, cultural and political role, Islamic movements and states and relations with the West. (S)

INR 4090 Ethical Problems in International Relations (IP) (3). Explores several approaches to the international ethical problems posed by intervention, human rights abuses, nuclear threats, global economic privation and other international phenomena. Prerequisite: INR 2001.

INR 4247 Caribbean Regional Relations (AS) (3). An examination of the forces and institutions which contribute to or inhibit cooperation and integration in the Caribbean. Prerequisites: INR 3246, CPO 3323, ECS 4432. (S)

INR 4283 International Relations, Development, and the Third World (AS, IP) (3). An examination of the impact of the theory and practice of development and the relations between nations, with particular emphasis on the Third World. Attention given to the role of international political and economic organizations in the development process. (F,S)

INR 4335 Strategic Studies and National Security (FP) (3). The role of force in international relations is examined. The use and control of force in theory and practice is analyzed. Special attention is paid to contemporary national security issues. (F,S)

INR 4404 International Protection of Human Rights (IL, IP) (3). Development of the concern of the international community with the rights of individuals and groups and the institutional mechanisms which have been set up for their protection. (F)

INR 4408 Topics in International Law (IL, IP) (3). An intensive examination of selected topics in international law and relations among nations. Topics will vary according to the interests of the instructor and the students. (F)

INR 4603 Theories of International Relations (3). Analysis and conceptualization of the forces and conditions which influence relations among nations. Emphasis is on the provision of an analytical basis for the study of international relations. Prerequisite: INR 2001 or permission of the instructor. (F,S,SS)

INR 4905 Independent Study (VAR). Directed independent research. Requires prior approval by instructor. (F,S,SS)

INR 4931 Topics in International Relations (3). Varies according to the instructor. (F,S,SS)

INR 4943 Internship in International Affairs (IP) (3-6). Work 10-15 hours a week with a consulate, business, bank, private voluntary organization, governmental agency or consulting firm for professional experience in international affairs. Prerequisite: INR 2001.

INR 4949 Cooperative Education in Social Sciences (3). A student majoring in one of the Social Sciences (Economics, International Relations, Political Science, Sociology, or Psychology) may spend one or two semesters fully employed in industry or

government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department. (F,S,SS)

INR 5007 Seminar in International Politics (3). An advanced graduate course designed to give students a specialized knowledge of the classics in international politics. The course traces the development of international politics from Thucydides to the present.

INR 5086 Islam in International Relations (3). Analysis of the role of Islam in shaping the dynamics of contemporary international relations. Emphasis on the ideological, cultural, and political role of Islamic movements and states, and their relations with the West. (F)

INR 5087 Ethnicity and the Politics of Development (3). This course examines the conceptual and substantive dimensions of ethnicity in the context of world politics and political development. The course will highlight ethnicity and ethnic groups as critical factors in North-South politics. (F)

INR 5255 Seminar in African Development (3). Examines political, economic and social development in Sub-Saharan Africa in an international context. Introduces students to sources for research in African international development. Prerequisites: Undergraduate course on Africa or graduate status.

INR 5315 Foreign Policy Analysis (3). Comparative examination of theories of foreign policy making, emphasizing the international, domestic, and organizational contexts in which national policies are formulated and enacted. Prerequisites: Graduate standing or permission of the instructor. (F)

INR 5409 International Law I (3). Role of international law in the relations of states; nature, development, theory, sources of law; international personality; jurisdiction, including territory and nationality; dispute settlement. (F)

INR 5507 International Organizations I (3). Study of international organizations and their role in international relations. Emphasis on their legal status, rule-making capacities and role in dispute settlement and maintenance of peace. (S)

INR 5607 International Relations and Development (3). An analysis and conceptualization of the process of development as it takes place in the international context. Special attention given to the role of international organizations in promoting development and the manner in which differences in developmental levels conditions international relations. (S)

INR 5615 Research Design in International Relations (3). Introduces graduate students to the principles of formulating and defending a compelling research design, gathering and analyzing evidence, and producing scholarship.

INR 5906 Independent Study (VAR). Directed independent research. Requires prior approval by instructor. (F,S,SS)

INR 5945 Graduate Pedagogy (1). The development of teaching skills required by graduate assistants, including classroom skills, designing examinations, etc. Prerequisite: Graduate Assistants.

PUP 3206 International Law and the Environment (IL, IP) (3). Introduction to the growing body of international laws on environmental issues, with special emphasis on important cases. Recent attempts to coordinate and regulate activities affecting the global environment, with particular attention to the UN Environmental Agency. (S)

Liberal Studies

Janat F. Parker, *Professor, Psychology, and Director of Liberal Studies*
Marcelle M. Welch, *Professor, Modern Languages and Associate Director of Liberal Studies*

The Liberal Studies Program exposes the student to a wide range of courses offered by the College, while granting the opportunity to pursue an individualized program of studies under the Liberal Studies guidelines. These guidelines include six categories of courses: (1) Foundations of Liberal Studies, two courses to be taken as early as possible; (2) Interdisciplinary Colloquia, two courses involving faculty from several departments of the College, and dealing with interdisciplinary topics; (3) Natural Sciences, two courses to expose the student to the scientific method and its application to problems in biology, chemistry, environmental science, geology, and physics; (4) Humanities, two courses dealing with the analysis of literary, philosophical, religious and historical texts or works of art, music, and theatre; (5) Social Sciences, two courses to expose the student to the basic theories and methods of social scientists in the fields of anthropology, economics, international relations, political science, psychology, and sociology; (6) Artistic Creation, one course in studio art or music, creative writing, or theatre to allow the student to experiment with his or her own creativity, and to experience the work of the artist.

Students are free to choose any combination of courses within these guidelines. Under the advisement of the Director or Associate Director of Liberal Studies, the student will be encouraged to pursue an individualized and focused program.

Bachelor of Arts

Degree Program Hours: 120

Lower Division Preparation

Common Prerequisites

No specific courses required; all students are encouraged to complete the Associate in Arts degree

Recommended Courses: Arts and Sciences concentration recommended.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program

Required Courses: (33)
Courses offered by any of the units of the College of Arts and Sciences, chosen in accordance with academic guidelines of the Program of Liberal Studies, to meet requirements in the four following areas:

Natural Sciences	6
Humanities	6
Social Sciences	6
Artistic Creation	3
Interdisciplinary Colloquia offered by the Liberal Studies Program	6
Foundations of Liberal Studies	6

All courses must be completed with a grade of "C" or better.

Electives: (27)
The remaining hours will be taken as electives.

Course Descriptions

Definition of Prefixes

IDS-Interdisciplinary Studies; SSI-Social Sciences: Interdisciplinary

IDS 2930 Faculty Scholars Seminar (1). Provides freshman Faculty Scholars the opportunity to participate in the interdisciplinary study of significant themes. May only be taken twice.

IDS 3930 Foundations of Liberal Studies (3). This will be a broad synthesis of knowledge and methods in the Arts and Sciences taught from the perspective of different disciplines. Specific topics will be announced in advance.

IDS 3949 Cooperative Education in Liberal Studies (3). A student majoring in Liberal Studies may spend one semester fully employed in industry in a capacity relating to the major.

IDS 4905 Independent Study (VAR). Cross-disciplinary topics for individual study and research to be chosen by students in consultation with their faculty advisors.

IDS 4920 Liberal Studies Colloquia (3). Individual sections will study, from an interdisciplinary perspective, issues selected and presented jointly by College faculty. Specific topics will be announced in advance.

IDS 4930 Foundations of Liberal Studies (3). This will be a broad synthesis of knowledge and methods in the Arts and Sciences, taught from the perspective of different disciplines. Specific topics will be announced in advance.

IDS 4949 Cooperative Education in Liberal Studies (3). A student majoring in Liberal Studies may spend one semester fully employed in industry in a capacity relating to the major.

SSI 3240 World Prospects and Issues (3). This course examines, from a multidisciplinary point of view, specific global issues such as food, population, and arms control. The issues discussed may change from one semester to the next.

Labor Studies

Required Courses for Liberal Studies: (33)

Thirty-three semester hours of concentration at the 3000 or 4000 level as required for all Libera! Studies students to be selected in consultation with and agreement of advisor. Courses are to meet requirements in the following areas:

Natural Sciences	6
Humanities	6
Social Sciences	6
Artistic Creation	3
Interdisciplinary Colloquia	6
Foundations of Liberal Studies	6

When possible, these courses should be selected from the list of required and elective courses for Labor Studies. All courses must be completed with a grade of 'C' or better.

Required Courses for Labor Studies Concentration: (12)

LBS 3001	Introduction to Labor Studies

Minimum of three courses (nine hours) to be chosen from the following: (additional courses from this list may be used to fulfill electives). To be chosen in consultation with and agreement of advisor.

ECO 3021	Economics and Society, Micro
LBS 4101	Theories of the Labor Movement
LBS 4210	Women and Work in the United States
LBS 4501	Labor and Industrial Relations Law
LBS 4900	Directed Study in Labor Studies
SYO 4360	Industrial Sociology

Electives (15)

To be chosen from the following in consultation with and agreement of advisor (some of these courses may require prerequisites).

Economics

ECO 3011	Economics and Society, Macro
ECO 3101	Intermediate Microeconomics
ECO 3303	Development of Economic Thought
ECO 4321	Radical Political Econ
ECO 4622	Economic Development of U.S.
ECO 4701	World Economy
ECO 4733	Multinational Corporations
ECP 4203	Intro to Labor Economics
ECP 4204	Theory of Labor Economics
ECS 3402	The Political Economy of South America

History

AMH 2020	American History 1850-Present
AMH 3270	Contemporary U.S. History
AMH 4251	The Great Depression
AMH 4500	United States Labor History
EUH 4660	Modern Europe, 1789 to the Present
LAH 3200	Latin America: The National Period
LAH 4511	Argentina: 18th-20th Centuries
LAH 4600	History of Brazil

Industrial Engineering

EIN 4214	Safety in Engineering
EIN 4261	Industrial Hygiene

International Relations

INR 3004	Patterns of International Relations
INR 3043	Population and Society
INR 4283	International Relations, Development, and the Third World

Labor Studies

LBS 4150	Contemporary Labor Issues
LBS 4260	Administration of Labor Organizations
LBS 4401	Collective Bargaining in Industrial Systems
LBS 4461	Labor Dispute Resolution
LBS 4654	Comparative and International Labor Studies
LBS 4905	Topics in Labor Studies
LBS 4930	Topics in Labor Studies
LBS 5464	Fact Finding and Arbitration

Management

MAN 4401	Collective Bargaining
MAN 4410	Union-Management Relations
MAN 4610	International and Comparative Industrial Relations

Philosophy

PHI 2600	Introduction to Ethics
PHI 3636	Professional Ethics
PHM 3200	Social and Political Philosophy
PHM 3400	Philosophy of Law

Political Science

POS 3424	Legislative Process
POS 4071	Corporate Power and Politics
POS 4122	State Government and Politics
POT 3204	American Political Thought
POT 3302	Political Ideologies
PUP 4004	Public Policy (U.S.)

Psychology

INP 2002	Introductory Industrial/Organizational Psychology

Public Administration

PAD 2002	Intro to Public Administration
PAD 4223	Public Sector Budgeting
PAD 5427	Collective Bargaining in the Public Sector

Sociology/Anthropology

ANT 4007	The Organizer
ISS 3330	Ethical Issues in Social Sciences
SYA 3300	Research Methods
SYA 4010	Sociological Theories
SYO 4360	Industrial Sociology
SYO 4530	Social Stratification (Mobility)
SYP 4421	Man, Society and Technology

Statistics

STA 1013	Statistics for Social Services
STA 2122	Introduction to Statistics I
STA 3123	Introduction to Statistics II

Theatre

SPC 2600	Public Speaking

Course Descriptions

Definition of Prefixes

LBS - Labor Studies

LBS 3001 Introduction to Labor Studies (3). History and development of the labor movement, with emphasis on union development as a response to industrialization and technological change. Includes the structure and functioning of modern unions, the development of modern technology, the industrial working class, and the impact of the rural-urban shift of labor.

LBS 3949 Cooperative Education in Labor Studies (1-3). One or two semesters of part or full-time work related to the major. Written reports and supervisor evaluations required. Prerequisite: Permission of Labor Studies Program.

LBS 4101 Theories of the Labor Movement (3). This course deals with theories which have attempted to explain the origins, developments, and functioning of the labor movement.

LBS 4150 Contemporary Labor Issues (3). Studies of contemporary labor issues selected from such areas as collective bargaining, arbitration, mediation, legislation, regulative and administrative law, employment discrimination, and union grievances.

LBS 4210 Women and Work in the United States (3). The role of women in the work force and in unions with historical, social, and economic emphasis.

LBS 4260 Administration of Labor Organizations (3). Administration of labor organizations; labor policies and practices; legal requirements and financial administration of unions. Prerequisite: LBS 3001.

LBS 4401 Collective Bargaining in Industrial Systems (3). A comprehensive study of collective bargaining with emphasis upon the private sector. Included will be negotiations and scope of contracts, day-to-day contract administration, and major bargaining issues.

LBS 4461 Labor Dispute Resolution (3). Theory and practice of dispute resolution in industry arbitration processes, grievances, mediation, fact-finding, and conciliation. Arbitration of industrial claims and disputes, commercial arbitration. Prerequisite: LBS 3001.

LBS 4501 Industrial and Labor Relations Law (3). Studies the history and current functioning of labor law with special emphasis upon the private sector.

LBS 4654 Comparative and International Labor Studies (3). A study of labor issues from a comparative and international perspective with emphasis upon the impact of international organizations on labor relations systems and a

comparison among major labor relations models.

LBS 4900 Directed Study in Labor Studies (3). Supervised reading and/or field research and training.

LBS 4905/4930 Topics in Labor Studies (3). Selected topics or themes in Labor Studies. The themes will vary from semester to semester. With a change in content, course may be repeated.

LBS 4949 Cooperative Education in Labor Studies (1-3). One or two semesters of part or full-time work related to the major. Written reports and supervisor evaluations required. Prerequisite: Permission of Labor Studies Program.

LBS 5464 Fact Finding and Arbitration (3). Study of labor dispute resolution with emphasis on grievances, fact-finding, and arbitration.

Mathematics

Enrique Villamor, *Associate Professor and Chairperson*
Kaushal Ajitabh, *Assistant Professor*
Gerardo Aladro, *Associate Professor*
Shamita Dutta Gupta, *Assistant Professor*
Julian Edward, *Associate Professor*
Domitila Fox, *Instructor*
Susan Gorman, *Instructor*
Steven M. Hudson, *Associate Professor*
George Kafkoulis, *Associate Professor*
Mark Leckband, *Associate Professor*
Thomas Leness, *Assistant Professor*
Bao Qin Li, *Associate Professor*
Diana McCoy, *Instructor*
Abdelhamid Meziani, *Professor*
Richard Nadel, *Instructor*
Taje Ramsamujh, *Associate Professor*
David Ritter, *Associate Professor*
Michael Rosenthal, *Instructor*
Dev K. Roy, *Associate Professor*
Richard L. Rubin, *Associate Professor*
Mitch Rudominer, *Assistant Professor*
Philippe Rukimbira, *Associate Professor*
Anthony C. Shershin, *Associate Professor*
Minna Shore, *Instructor*
Theodore Tachim Medjo, *Assistant Professor*
Graham Taylor, *Assistant Professor*
John Zweibel, *Associate Professor*

An undergraduate student may major in Mathematics or in Mathematical Sciences. The Bachelor's degree in Mathematics emphasizes a deeper study of pure mathematics in the traditional mode. A student planning to continue into graduate study should major in Mathematics.

The Mathematical Sciences degree offers an alternative involving more breadth. The mathematical requirements, which are fewer and tend to be more applied, are supplemented by additional requirements in computer science and applied statistics.

Bachelor of Science in Mathematical Sciences

Degree Program Hours: 120

Lower Division Preparation

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Required Courses

Common Prerequisites

MAC 2311	Calculus I
MAC 2312	Calculus II
MAC 2313	Calculus III
COP 2210	Introduction to Programming
	or
CGS 2420	Fortran for Engineers
	or
CGS 2423	C for Engineers

Completion of two of the following courses with labs:

BSC 1010	General Biology I
BSC 1010L	General Biology Lab I
BSC 1011	General Biology II
BSC 1011L	General Biology Lab II
CHM 1045	General Chemistry I
CHM 1045L	General Chemistry Lab I
CHM 1046	General Chemistry II
CHM 1046L	General Chemistry Lab II
PHY 2048	Physics with Calculus I
PHY 2048L	Physics with Calculus Lab I
PHY 2049	Physics with Calculus II
PHY 2049L	Physics with Calculus Lab II

Courses required for the degree:

MAP 2302	Differential Equations
MAS 3105	Linear Algebra

Upper Division Program

Required Courses

COP 3402	Fundamentals of Computer Systems	3
COP 3337	Intermediate Programming	3
MAD 2104	Discrete Mathematics	3
MAD 3401	Numerical Analysis	3
MAD 3512	Introduction to the Theory of Algorithms	3
MAP 4401	Advanced Differential Equations	3
STA 3163-4	Statistical Methods I and II	3-3

In addition, two courses from the following list:

COP 3530	Data Structures	3
MAA 4402	Complex Variables	3
MAD 3305	Graph Theory	3
MAP 3103	Mathematical Modeling	3
MHF 4302	Mathematical Logic	3
STA 5446	Probability Theory	3

Electives

The balance of the 60 semester hour requirement for graduation may be chosen from any courses in the University approved by the student's advisor.

Remarks: The following courses are not acceptable for credit toward graduation, unless a student has passed the course before declaring a Mathematical Sciences major: MAC 2233, STA 1013, STA 3122-23, STA 2023, and QMB 3150 (College of Business Administration).

Minor in Mathematical Sciences

Required Courses

MAC 2311-2-3. Calculus I,II,III *(or equivalent).*

Plus four courses from those approved for the Mathematical Sciences Major program. MAP 2302 and MAS 3105 may be included among these four courses. A grade of 'C' or higher is necessary for the minor.

Remarks: Except for MAC 2311, MAC 2312, or MAC 2313; no mathematical sciences courses (Computer Science, Mathematics, or Statistics) can be applied to more than one minor, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a mathematical science course is required for a student's major requirements, that course may not be included among the four courses used for the mathematical sciences minor.

Bachelor of Science in Mathematics

Degree Program Hours: 120

Lower Division Preparation

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Required Courses

Common Prerequisites

MAC 2311	Calculus I
MAC 2312	Calculus II
MAC 2313	Calculus III
COP 2210	Introduction to Progamming
	or
CGS 2420	Fortran for Engineers
	or
CGS 2423	C for Engineers

Completion of two of the following courses with labs:

BSC 1010	General Biology I
BSC 1010L	General Biology Lab I
BSC 1011	General Biology II
BSC 1011L	General Biology Lab II
CHM 1045	General Chemistry I
CHM 1045L	General Chemistry Lab I
CHM 1046	General Chemistry II
CHM 1046L	General Chemistry Lab II

PHY 2048	Physics with Calculus I	
PHY 2048L	Physics with Calculus Lab I	
PHY 2049	Physics with Calculus II	
PHY 2049L	Physics with Calculus Lab II	

Courses required for the degree:

MAP 2302	Differential Equations	
MAS 3105	Linear Algebra	

Upper Division Program

Required Courses

MAA 3200	Introduction to Analysis	3
MAA 4211	Advanced Calculus	3
MAS 4301	Algebraic Structures	3
STA 4321	Mathematical Statistics I	3

In addition, three courses from each of the following lists.

List 1

MAD 4203	Introduction to Combinatorics	3
MAA 4402	Complex Variables	3
MTG 3212	College Geometry	3
MAS 4213	Number Theory	3
MAA 4212	Topics in Advanced Calculus	3
MAS 4302	Topics in Algebraic Structures	3
MTG 4302	Topology	3

List 2

MAP 4401	Advanced Differential Equations	3
MAD 3305	Graph Theory	3
MAP 3103	Mathematical Modeling	3
STA 4322	Mathematical Statistics II	3
MAD 3401	Numerical Analysis	3
MHF 4302	Mathematical Logic	3
MHF 4102	Axiomatic Set Theory	3

Electives

The balance of the 60 semester hour requirement for graduation may be chosen from any courses in the University approved by the student's advisor.

Remarks: The following courses are not acceptable for credit toward graduation, unless a student has passed the course before declaring a Mathematics major: MAC 2233, STA 1013, STA 3122-23, STA 2023, and QMB 3150 (College of Business Administration).

Minor in Mathematics

Required Courses

MAC 2311-2-3 Calculus I-I-III *(or equivalent)*.

Plus four courses from those approved for the Mathematics Major program. MAP 2302 and MAS 3105 may be included among these four courses. A grade of 'C' or higher in each of these courses is necessary for the minor.

Remarks: Except for MAC 2311, MAC 2312, or MAC 2313; no mathematical sciences courses (Computer Science, Mathematics, Statistics) can be applied to more than one minor, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a mathematical sciences course is required for a student's major requirements, that course may not be included among the four courses used for the mathematics minor.

Certificate in Actuarial Studies

The department offers a certificate in Actuarial Studies. For further information refer to the Certificate section at the end of the College of Arts and Sciences' section.

Course Descriptions

Definition of Prefixes

MAA-Mathematics, Analysis; MAC-Mathematics, Calculus and Pre-Calculus; MAD-Mathematics, Discrete; MAP-Mathematics, Applied; MAS-Mathematics, Algebraic Structures; MAT-Mathematics, General; MGF-Mathematics, General and Finite; MHF-Mathematics, History and Foundations; MTG- Mathematics, Topology and Geometry.

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

MAA 3200 Introduction to Advanced Mathematics (3). Topics include: naive set theory, functions, cardinality, sequences of real numbers and limits. Emphasis on formal proofs. Prerequisite: MAC 2313. (F)

MAA 4211 Advanced Calculus (3). An intense study of the foundations of calculus. Topics may include: the real number system, continuity, differentiation, Riemann-Stieltjes integration, and series of functions. Note: The student must complete MAA 3200 before attempting this course. Prerequisites: MAC 2313, MAS 3105 and MAA 3200. (S)

MAA 4212 Advanced Calculus II (3). A sequel to MAA 4211. Topics may include: theory of integration; analysis in several variables; and Fourier series. Prerequisite: MAA 4211.

MAA 4402 Complex Variables (3). An introduction to complex variables, beginning with the algebra and geometry of the complex number system. Topics include: complex functions; analytic functions; Cauchy's theorem and its consequences; Taylor and Laurent series; residue calculus; evaluation of real integrals and summation of series; conformal mapping. Prerequisites: MAC 2313, and MAP 2302 or MAA 4211. (F)

MAC 1102 College Algebra (3). Polynomial and rational functions, linear and quadratic equations, inequalities, lines and circles, inverse functions, exponential and logarithmic functions. Students cannot receive credit for both this course and MAC 2132 Precalculus. Prerequisite: High school algebra. (F,S,SS)

MAC 1114 Trigonometry (3). Trigonometric functions, identities, conditional equations, polar coordin-ates, vectors, polar graphs, complex numbers, DeMoivre's Theorem, conic sections. Student cannot receive credit for both this course and MAC 2132 Precalculus. Prerequisites: College Algebra or equivalent. (F,S,SS)

MAC 2132 Pre-calculus Mathematics (3). Topics to be covered include: functions, exponential and logarithmic functions, trigonometry and the basics of analytic geometry. Prerequisite: Two years of high school algebra. (F,S,SS)

MAC 2233 Calculus For Business (3). A one semester introduction to the basic notions of calculus. Specific topics include: Differential Calculus using polynomial, exponential and logarithmic functions, and its application to optimization; integral calculus with area and probability applications. Prerequisite: MAC 2132 or working knowledge of algebra. (F,S,SS)

MAC 2311 Calculus I (4). Introduction to derivatives, differentiation formulas, differentials, applications of the derivative; introduction to anti-derivatives. Prerequisite: Trigonometry or MAC 2132, with a grade of C or better. (F,S,SS)

MAC 2312 Calculus II (4). Riemann sums, techniques of integration, applications of the integral, improper integrals, infinite series, Taylor series, polar and parametric functions. Prerequisite: MAC 2311, with a grade of C or better. (F,S,SS)

MAC 2313 Multivariable Calculus (4). This course deals with the differential and integral calculus of real valued multivariable functions. The

topics include: directional and partial derivatives, gradients, and their applications; differential calculus of vector valued functions; multiple, iterated, line, and surface integrals. Prerequisite: MAC 2312 or equivalent with a grade of 'C' or better. (F,S,SS)

MAD 2104 Discrete Mathematics (3). Sets, functions, relations, permutations, and combinations, propositional logic, matrix algebra, graphs and trees, Boolean algebra, switching circuits. Prerequisites: COP 2210 or CGS 2420 and MAC 2311. (F,S,SS)

MAD 3305 Graph Theory (3). An introduction to the study of graphs. Topics include the following: paths and circuits, connectedness, trees, shortest paths, networks, planar graphs, the coloring of graphs, and directed graphs. Applications of graphs to computer science will be discussed. Prerequisites: COP 2210 or CGS 2420 and either MAS 3105 or MAD 2104. (F,S,SS)

MAD 3401 Numerical Analysis (3). Basic ideas and techniques of numerical analysis. Topics include: finite differences, interpolation, solution of equations, numerical integration and differentiation, applications, introduction to applied linear algebra. This course will make extensive laboratory use of the computer facility. Prerequisites: COP 2210 or CGS 2420 and MAC 2312. (F,S,SS)

MAD 3512 Theory of Algorithms (3). Strings, formal languages, finite state machines, Turing machines, primitive recursive and recursive functions, recursive unsolvability. Prerequisite: MAD 2104. Computer Science majors must also take COT 3420. (F,S,SS)

MAD 4203 Introduction to Combinatorics (3). A survey of the basic techniques of combinatorial mathematics. Topics will include the Pigeonhole Principle, Binomial Coefficients, Inclusion-Exclusion, Recurrence Relations, and Generating Functions. Prerequisites: MAC 2313 or both MAC 2312 and MAD 2104. (SS)

MAP 2302 Differential Equations (3). An introduction to differential equations and their applications, based upon a knowledge of calculus. Topics to include: initial value problems of the first order, numerical solutions, systems of differential equations, linear differential equations, Laplace transforms, series solutions. Prerequisite: MAC 2312 with a grade of 'C' or better. (F,S,SS)

MAP 3103 Mathematical Modeling and Applications (3). A course to provide an understanding of the use of mathematical models in the description of the real world. Basic principles in the philosophy of formal model building as well as specific models will be considered. Prerequisites: MAS 3105 and either MAC 2313 or MAP 2302.

MAP 3104 Topics in Mathematical Modeling (3). A sequel to MAP 3103. In-depth study of techniques listed for MAP 3103. Prerequisite: MAP 3103.

MAP 4401 Advanced Differential Equations (3). A second course in differential equations. Topics may include: Bessel functions and other special functions arising from classical differential equations, Sturm-Liouville problems, partial differential equations, transform techniques. Prerequisites: MAP 2302 and MAC 2313. (S)

MAS 3105 Linear Algebra (3). An introduction to the topics in linear algebra most often used in applications. Topics include: matrices and their applications; simultaneous linear equations and elementary operations; linear dependence; vector spaces; rank and inverses; inner products and 'best' approximations; numerical solutions of simultaneous linear equations; eigenvalues and eigenvectors; iterative methods for calculating eigenvalues; and systems of linear equations. Prerequisite: MAC 2312. (F,S,SS)

MAS 3931 Topics in Actuarial Mathematics (1). Topics related to calculus/linear algebra such as monotone sequences, least upper bound, complex arithmetic, solid analytic geometry, linear transform-ations. Mathematics involved in insurance. Prerequisites: Admission to Actuarial Studies Certificate program.

MAS 4213 Number Theory (3). Topics to be discussed are selected from the following: congruences, Diophantine equations, distribution of primes, primitive roots, quadratic reciprocity, and classical theorems of number theory. Prerequisites: MAC 2312 or permission of the instructor. (SS)

MAS 4301 Algebraic Structures (3). An introduction to abstract mathematical structures of modern algebra. Fundamental concepts of groups, rings, and fields will be studied. Note: the student must complete MAA 3200 before attempting this course. Prerequisites: MAS 3105 and MAA 3200. (S)

MAS 4302 Topics in Algebraic Structures (3). A sequel to Algebraic Structures. Topics may include: a continuation of the study of groups, rings and/or fields; polynomial domains; Euclidean domains; and Galois theory. Prerequisite: MAS 4301.

MAT 2949 Cooperative Education in Mathematical Sciences (1-3). One semester of full-time supervised work in an outside organization taking part in the University Co-op program. A written report and supervisor evaluation will be required of each student. Prerequisites: Calculus I and COP 2210.

MAT 3905 Independent Study (VAR). Individual conferences, assigned readings, and reports on independent investigations.

MAT 3930 Special Topics (VAR). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

MAT 3949 Cooperative Education in Mathematical Sciences (1-3). One semester of full-time supervised work in an outside organization taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluation will be required of each student. Prerequisites: Calculus II and COP 2212.

MAT 4905 Independent Study (VAR). Individual conferences, assigned readings, and reports on independent investigations.

MAT 4930 Special Topics (VAR). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

MAT 4943 Mathematical Sciences Internship (VAR). A special program to encourage students to get on-the-job experience in computer sciences, statistics, or mathematics in an industrial enterprise, governmental agency or other organization. Require-ments: minimum grade of 'B' or higher in all courses in the major area, and approval by Departmental Internship Committee. Application is required at least one term in advance of registration for this course.

MAT 4949 Cooperative Education in Mathematical Sciences (1-3). One semester of full-time supervised work in an outside organization taking part

in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluation will be required of each student. Prerequisites: Calculus II, a statistics course, and COP 2120.

MGF 1202 Finite Mathematics (3). Study of concepts and applications involving finite mathematical processes such as sets, combinatorial techniques, formal logic, discrete probability, linear systems, matrices, linear programming. Prerequisite: Working knowledge of high school algebra. (F,S,SS)

MHF 1202 Sets, Logic, and Writing (3). Intuitive set theory, introduction to symbolic logic, the relationship between them and their applications to problem-solving, involving writing as a crucial tool in the course. Prerequisite: permission of Undergraduate Studies. (SS)

MHF 3404 History of Mathematics (3). Development of mathematical thought through the ages. Topics may include equation solving, trigonometry, astronomy, and calculus. Prerequisite: MAC 2312. (S)

MHF 4102 Axiomatic Set Theory (3). Axioms of set theory, order and well-foundedness, cardinal numbers, ordinal numbers, axiom of choice, special topics. Prerequisites: MAA 3200 or permission of the instructor. (S, alternate years)

MHF 4302 Mathematical Logic (3). A study of formal logical systems and their applications to the foundations of mathematics. Topics to be selected from the following: definition of mathematical proofs; set theory; analysis formalized with the predicate calculus; theorem of Godel and Church; recursive function theory; and idealized computers. Prerequisite: MAA 3200 or MAD 3512. (S, alternate years)

MTG 3212 College Geometry (3). A study of the basic structure of Euclidean geometry together with topics from advanced Euclidean geometry and non-Euclidean geometry. Prerequisite: Calculus II or permission of the instructor. (S)

MTG 4302 Topology (3). An introductory course in topology requiring a prerequisite knowledge of calculus. Topics to be discussed will be selected from the following: topological spaces, metric spaces, continuity, completeness, compactness, separation axioms, products spaces, subspaces, convergence, and homotopy theory. Prerequisites: MAC 2313, MAS 3105, and MAA 3200. (SS)

STA 4603-STA 4604 Mathematical Techniques of Operations Research I and II (3-3) . An introduction to those topics in mathematics associated with studies in operations research. Topics include the following: linear programming and related topics, dy-namic programming, queuing theory, computer simulation, network analysis, inventory theory, decision theory, integer programming. Prerequisites: MAS 3105 and either STA 3033 or STA 4322.

Modern Languages

Isabel Castellanos, *Professor and Chairperson*
Aurelio Baldor, *Instructor*
Pascale Becel, *Associate Professor*
Jean-Robert Cadely, *Assistant Professor*
Eric Camayd-Freixas, *Assistant Professor*
Ricardo Castells, *Associate Professor*
James O. Crosby, *Professor Emeritus*
Leonel A. de la Cuesta, *Professor*
Maria Antonieta Garcia, *Visiting Instructor*
Asuncion Gomez, *Assistant Professor*
Yvonne Guers-Villate, *Professor Emeritus*
John B. Jensen, *Professor*
Danielle Johnson-Cousin, *Associate Professor*
Santiago Juan-Navarro, *Assistant Professor*
Peter A. Machonis, *Associate Professor*
Ramon Mendoza, *Professor (North Campus)*
Marian Montero-Demos, *Associate Professor (North Campus)*
Ana Roca, *Associate Professor*
Reinaldo Sanchez, *Professor*
Juan Torres-Pou, *Assistant Professor*
Maida Watson, *Professor*
Marcelle Welch, *Professor*
Theodore Young, *Assistant Professor*
Florence Yudin, *Professor*

Bachelor of Arts

Degree Program Hours: 120

Lower Division Preparation

Common Prerequisites

French

FRE 1120	French I
FRE 1121	French II
FRE 2200	Intermediate French

Required for the Major:

FRE 2241	Oral Communication Skills

German

Common Prerequisites

GER 1130	German I
GER 1131	German II
GER 2210	Intermediate German

Required for the Major:

GER 2240	German Intermediate Conversation

Portuguese

Common Prerequisites

POR 1130	Portuguese I
POR 1131	Portuguese II
POR 2200	Intermediate Portuguese

Required for the Major:

POR 3400	Advanced Oral Communication

Spanish

Common Prerequisites

SPN 1120	Spanish I
SPN 1121	Spanish II
SPN 2200	Intermediate Spanish

Required for the Major:

SPN 2210	Oral Communication Skills
	or
SPN 2340	Intermediate Spanish for Native Speakers

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program:) (60)

Required Courses

Foreign Language 33 semester hours
Electives 27 semester hours

Students in the Teacher Preparation Program carry two majors: Modern Language and Modern Language Education and must request admission to both programs. (Students interested in teacher certification should contact the College of Education at 348-2721.)

Requirements for all Modern Language Majors

All majors must have a designated faculty advisor, and all are required to take 33 semester hours in the Department of Modern Languages, with a grade of 'C' or higher.

Requirements For Spanish Majors

To undertake a major in Spanish, a student must demonstrate a proficiency in the language at the intermediate level. This may be done by an examination administered by the Department, or by completing SPN 2200 (non-native speakers) or SPN 2340 (native speakers).

Required credits for Major (33)
(21 credits of Core Courses and 12 credits of electives)

Core Courses

SPN 3301	Review Grammar and Writing	3
	or	
SPN 2341	Advanced Spanish for Native Speakers	3
SPN 3422	Advanced Grammar and Composition	3
SPW 3820	Peninsular Spanish Literature	3
SPW 3130	Spanish American Literature	3
SPN 3733	General Linguistics *(or equivalent)*	3
One additional course in Spanish Linguistics		3
One additional course in Spanish		
	or	
Spanish American Literature		3

(Students who have advanced proficiency in Spanish may replace the six language credits with electives in Spanish at the 3000 or 4000 level with the written permission of their advisors).

Elective Courses

Twelve credits of electives in Spanish at the 3000 or 4000 level from a range of courses in Spanish/Spanish American literature, Spanish linguistics, Hispanic culture, and Translation/Interpretation.

SPN 3733	General Linguistics *(or equivalent) is a prerequisite for other linguistics offerings.*

Requirements for French Majors (33)

Basic Courses:

Grammar (6)

FRE 3420	Review Grammar/ Writing I *(non-native or near-native speakers)*
FRE 3421	Review Grammar Writing II
FRE 4422	Review Grammar/ Writing III

Conversation (3)

FRE 3410	Advanced French Conversation *(non-native or near-native speakers)*
FRE 3413	Communication Arts
FRE 3504	Language and Culture

Phonetics (3)

FRE 3780	French Phonetics

Advanced Courses:

Literature (at least nine credits)

FRW 3200	French Literature I
	or
FRW 3201	French Literature II
	or
FRW 3810	Literary Analysis

Two 3-credit literature courses (FRW) preferably taken in different literary periods or genres.

Linguistics (3)

FRE 4840	History of the Language I
FRE 4841	History of the Language II
FRE 4503	Francophonie
FRE 4850	Structure of Modern French

Civilization (6)

FRE 3504	Language and Culture	
FRE 3500	History of French Society	
FRE 4501	Contemporary French Society	
FRE 4935	Senior Seminar (Civilization)	

Elective (3)

French linguistics or literature	3

Requirements for Portuguese Majors (33)

21 credits of core Courses and 12 credits of electives

All majors in the Department of Modern Languages are required to take 33 semester hours in the Department. Twenty-one of these must be in Portuguese (POR or POW prefix) at a level of POR 3400 or above. The other 12 credits may be upper-division courses in a second language, linguistics, culture, or translation, with the approval of the advisor. Courses focusing on Brazil or Portugal offered by other departments may be counted toward the degree with approval of advisor and chairperson of the Department.

Requirements for Other Language Majors

A major in a language other than Spanish or French may take only 21 credits in the major target language, but completion of at least two semesters of a second foreign language is recommended. There is no fixed sequence of courses required, and a student may enroll in any course offered for majors, provided he or she meets the course prerequisites.

Minor in French Language and Culture

A student majoring in another discipline may earn an academic minor in French Language and Culture by taking 1) 12 semester hours of course work in French language FRE 3410, FRE 3420/3421, FRE 3780; 2) three semester hours in French Civilization and Culture FRE 3500 or FRE 4501; 3) three semester hours of restricted electives courses in French linguistics, French Translation Skills or French Literature I, FRW 3200.

Minor in Portuguese

A student majoring in another discipline may earn an academic minor in Portuguese by taking 12 semester hours of course work in the language at the level of POR 3420 or above, and six additional hours in Portuguese or in approved courses in a related discipline, such as linguistics or the civilization of Portuguese-speaking peoples.

Minor in General Translation Studies

In order to obtain an academic minor in General Translation Studies, *a* student takes 12 semester hours in translation/interpretation courses (FOT, FRT, or SPT prefix), with grades of B or better, and nine additional hours in courses of immediate relevance to the program, to be approved by the Director of the program. Normally these will be selected from among offerings in Political Science, Economics, International Relations, Sociology, Anthropology, Computer Science or Modern Languages. At least two of them should be taken outside of Modern Languages. Courses in basic and intermediate instruction shall not be counted for the minor.

Minor in Spanish Language and Culture

Required Credits for Minor

Fifteen credits of Core Courses and three credits of electives. Total: 18 semester hours.

Core Courses

SPN 3301	Review Grammar and Writing	3
	or	
SPN 2341	Advanced Spanish for Native Speakers	3
SPN 3733	General Linguistics (or equivalent)	3
SPW 3820	Peninsular Spanish Literature	3
SPW 3130	Spanish American Literature	3
One SPN course on Culture		3

Elective Courses

Three credits in Spanish at the 3000 or 4000 level in language, literature, culture, or translation/interpretation.

Students who have advanced proficiency in Spanish may replace SPN 3422 Review Grammar and Writing or SPN 2341 Advanced Spanish for Native Speakers with another upper-level Spanish elective with the written permission of their advisors.

SPN 3733 (or equivalent) is a prerequisite for other linguistics offerings.

Basic Language Instruction

The department offers three-semester sequences of instruction in beginning and intermediate Arabic, Chinese, French, German, Hebrew, Italian, Japanese, Portuguese, Spanish, Russian, and beginning instruction in other languages.

The courses in basic language instruction are designed primarily for persons wishing to acquire conversational ability in a foreign language; but they provide training in all four language skills listening, speaking, reading, and writing. Students are advised to consult the Departmental course listing for specific sections.

Course Descriptions

Definition of Prefixes

ARA-Arabic Language; CHI-Chinese Language; FOL-Foreign Languages; FOT-Foreign Languages in Translation; FOW-Foreign Languages, Comparative Literature; FRE-French Language; FRT-French Translation; FRW-French Literature (Writings); GER-German Language; GET-German Translation; HBR -Hebrew; ITA-Italian Language; ITT-Italian Translation; JPN-Japanese Language; LIN-Linguistics; POR-Portuguese Language; POW-Portuguese Literature (Writings); PRT-Portuguese Translation; RUS-Russian Language; SPN-Spanish Language; SPT-Spanish Translation; SPW-Spanish Literature (Writings).

(See English listing for additional Linguistics courses.)

ARA 3130 Arabic I (5). Provides training in the acquisition and application of basic language skills.

ARA 3131 Arabic II (5). Provides training in the acquisition and application of basic language skills.

ARA 3210 Intermediate Arabic (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisite: One year prior study or equivalent experience.

CHI 3130 Chinese I (5). Provides training in the acquisition and application of basic language skills.

CHI 3131 Chinese II (5). Provides training in the acquisition and application of basic language skills.

CHI 3210 Intermediate Chinese (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

FIL 5526 Spanish Film (3). The history of film in Spain and discussions of films by the most important 20th Century directors.

FIL 5527 Latin American Film (3). The study of 20th Century films and documentaries produced by leading Latin American directors. Films are examined in relation to Latin American Society and its literary creations.

FOL 1000 Elementary Foreign Language (3). Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. For languages not often taught. This course is not part of a series. No prerequisites.

FOL 3013 Language Skills for Professional Personnel (3). The course is geared to the special linguistic needs of community groups (medical, business, technical, etc.).

FOL 3732 Romance Linguistics (3). The common and distinctive Romance features. Survey of linguistic geography and internal/external influences.

FOL 3905 Independent Study (1-3). Project, field experience, readings, or apprenticeship.

FOL 3930 Special Topics (3). Readings and discussion of literary/linguistic topics to be determined by students and teacher.

FOL 3949 Cooperative Education in Modern Languages (3). A student majoring in one of the Humanities (English, History, Modern Languages, Visual Arts or Performing Arts) may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

FOL 3955 Foreign Study (3-12). Study abroad credits. Individual cases will be evaluated for approval.

FOL 4905 Independent Study (1-3). Project, field experience, readings, or research.

FOL 4930 Special Topics (3). Independent readings, research, or project.

FOL 4935 Senior Seminar (3). Topics and approach to be determined by students and instructor.

FOL 4949 Cooperative Education in Modern Languages (3). A student majoring in one of the Humanities (English, History, Modern Languages, Visual Arts or Performing Arts) may spend one or two semesters fully employed in industry or government in a capacity related to the major. Prerequisite: Permission of Cooperative Education Program and major department.

FOL 4958 Foreign Study: Advanced Language Literature (VAR 3-12). Study abroad credits. Individual cases will be evaluated for approval.

FOL 5735 Romance Linguistics (3). The common and distinctive Romance features. Survey of linguistic geography and internal/external influences.

FOL 5906 Independent Study (1-3). Project, field experience, readings, or research.

FOL 5945 Foreign Exchange Internship (0). Foreign exchange students perform graduate research in the Department of Modern Languages and English as a co-requisite to their assistantship in the Modern Languages Department. Prerequisite: Admission to the Foreign Exchange Program.

FOT 2120 Literature in Translation (3). Masterpieces of French literature in English. Comparative use of the original text. Discussion and interpretation.

FOT3800 Translation/Interpretation Skills (3). Emphasis on basic principles and practice application.

FOT 3810 Creative Writing/Translation (3). Training through non-structured writing. Examination of various approaches to the problems and objectives of creative translation.

FOT 4130 European Literature in Translation (3). For students proficient in more than one foreign language. Content and focus to be determined by student and instructor.

FOT 4801 Professional Translation/Interpretation (3). Techniques and resources for professional translation and interpretation. Prerequisite: FOT 3800.

FOT 5125 Literature in Translation (3). Masterpieces of world literature. Open to students who are proficient in more than one language.

FOT5805 Translation/Interpretation Arts (3). The language barrier and translation and interpretation. Types, modes, and quality of T/I: philological, linguistic, and socio-linguistic theories. History of T/I from Rome to date. The impact of T/I on Inter-American developments. Prerequisite: Graduate standing or permission of the instructor.

FOW 3520 Prose and Society (3). The dynamics of participation and alienation between prose writers and their environment.

FOW 3540 Bicultural Writings (3). Experiment in linguistic pluralism. Content and focus to be determined by the international community.

FOW 3580 Intellectual History (3). The interaction or dissociation among writers in a critical historical period. Study of primary sources and their contemporary evaluations.

FOW 3582 Literature of Reform (3). The consciousness of change in verbal art.

FOW 3584 Literature of Repression (3). The consciousness of constraints, their adoption and/or rejection in verbal art.

FOW 4390 Genre Studies (3). Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama).

FOW 4590 Creative Modes (3). Discussion of a single mode or a plurality of epoch styles such as classical/baroque, realism/surrealism. The peculiar/common features of expressive media.

FOW 4790 The Literary Generation (3). The real and apparent shared ideals of an artistic generation, its influence and range.

FOW 4810 Problems in Reading and Interpretation (3). The identification and appreciation of techniques for sensitive reading and discussion of literary texts.

FOW 5395 Genre Studies (3). Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama).

FOW 5545 Bicultural Writings (3). Experiment in linguistic pluralism. Content and focus to be determined by the international community.

FOW 5587 Comparative Studies (3). Cross-over and distinctiveness in a multi-language problem, period, or aesthetic.

FOW 5934 Special Topics in Language/Literature (3). Content and objectives to be determined by students and teacher.

FOW 5938 Graduate Seminar (3). Topic and approach to be determined by students and instructor. (Approval of the Department required.)

FRE 1013 Language Skills for Professional Personnel (1-3). The course is geared to the special linguistic needs of community groups (medical, business, technical, etc.).

FRE 1120 French I (5). Course designed specifically for beginning university students with no previous language study. Emphasis on oral French and on acquiring basic language skills.

FRE 1121 French II (5). Emphasis on oral French and on acquiring basic language skills.

FRE 1130 Accelerated Basic French (5). Accelerated course for students who already have some basic knowledge of French. Encourages rapid acquisition by intensive exposure to the language. Prerequisites: At least one year of High School French or equivalent.

FRE 2200 Intermediate French (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

FRE 2241 Oral Communication Skills (3). Development of oral skills through skits, debates, and hypothetical situations. Open to non-native speakers Prerequisites: FRE 1121 or FRE 1130 or equivalent.

FRE 2270 Foreign Study (3-12). Intermediate level. One semester full-time credit for foreign residence and study. Individual cases will be evaluated for approval.

FRE 3410 Advanced French Conversation (3). To develop oral proficiency skills and a greater awareness of French culture.

FRE 3413 Communication Arts (3). Develop communicative competence through intensive oral class work. Emphasis on ability to express ideas and appreciation of multiple aspects of French culture.

FRE 3420 Review Grammar/Writing I (3). Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.

FRE 3421 Review Grammar/Writing II (3). Instruction and practice in expository writing in French, with emphasis on organization, correct syntax, and vocabulary building. Prerequisite: FRE 3420.

FRE 3440 Business French (3). Introduces the minor and non-major to the culture, economy, and commerce of modern-day France. Extensive practice in business writing and communication. Conducted in French. Prerequisite: FRE 1121.

FRE 3441 Business French II (3). Provides intermediate training in the acquisition and application of business skills from an applied language vantage point. Prerequisite: FRE 3440 or permission of the instructor.

FRE 3500 History of French Civilization (3). Open to any student who understands the target language. The development of a particular civilization. Emphasis on the evolution of a society, its ideas and its values.

FRE 3504 Language and Culture (3). Emphasis on oral skill applied to contemporary culture, to enhance student's knowledge and understanding of French way of life in Francophone world. Emphasis is also placed on acquisition and intensive practice of vocabulary and grammar. Prerequisites: FRE 3410 or permission of the instructor.

FRE 3740 Applied Linguistics (3). Examination of available linguistic materials for self-instruction. Problem solving in syntax and phonetics, through the application of modern/traditional methods.

FRE 3780 French Phonetics (3). An introductory course in French linguistics. Includes the International Phonetic Alphabet and a systematic inventory of all the sounds of French, with refinement exercises in the language laboratory. Prerequisites: FRE 2200 or equivalent.

FRE 3781 Intermediate French Phonetics (1). Pronunciation of French for non-majors. Includes an introduction to the International Phonetic Alphabet and a systematic review of the sounds of French. Prerequisites: FRE 1120 and FRE 1121.

FRE 3820 Dialectology (3). Definition and analysis. Problem-solving in dialect classification.

FRE 4391 French Cinema (3). In-class viewing and discussion of selected French films to develop knowledge and understanding of this important aspect of French culture from beginnings to the present. Prerequisites: FRW 3200 or FRW 3810 and another FRW course.

FRE 4422 Review Grammar/Writing III (3). A study of various aspects of forms and styles, with emphasis on expository writing in French. Prerequisite: FRE 3421.

FRE 4470 Foreign Study: Advanced Language/Literature (3-15). Full-semester credit for foreign residence and study/work. (Approval of Department required.)

FRE 4501 Contemporary French Society (3). Course designed primarily for French majors, advanced undergraduates and graduates. Examination of the cultural, ideological, socio-political and economic fabric of France from WWI to the present. Prerequisites: FRE 3420 or permission of the instructor.

FRE 4503 La Francophonie (3). Analysis of the different varieties of French spoken outside of France. Includes Quebec French, African French, and French Creoles. Also examines the political alliance of Francophone countries. Credit will not be given for both FRE 4503 and FRE 5508. Prerequisites: FRE 3780 or LIN 3010 or LIN 3013.

FRE 4791 Contrastive Phonology (3). Contrasts in the sound systems of English and French.

FRE 4800 Contrastive Morphology (3). Contrasts in the morphology and syntax of English and French.

FRE 4840 History of the Language I (3). The internal and external history of the French language from Latin to Old French. Examination of some of the first texts written in French. Prerequisites: FRE 3780 or LIN 3010 or LIN 3013.

FRE 4841 History of the Language II (3). External and internal history of the French language from 1400 to the present. Examination of first dictionaries and grammars of French. Survey of recent linguistic legislation

concerning the French language. Prerequisites: FRE 3780 or LIN 3010 or LIN 3013.

FRE 4850 Structure of Modern French (3). Systematic study of the phonology, morphology, syntax, and lexicon of Modern French. Taught in English. Prerequisites: FRE 3780 or LIN 3010.

FRE 4935 Senior Seminar (3). Topic and approach to be determined by students and instructor.

FRE 5060 Language for Reading Knowledge I (3). Designed primarily for graduate students who wish to attain proficiency for M.A. and Ph.D. requirements. Open to any student who has no prior knowledge of the language.

FRE 5061 Language for Reading Knowledge II (3). Emphasis on translation of materials from the student's field of specialization. Prerequisite: FRE 5060 or equivalent.

FRE 5508 La Francophonie (3). Analysis of the different varieties of French spoken outside of France. Includes Quebec French, African French, and French Creoles. Also examines the political alliance of Francophone countries. Credit will not be given for both FRE 4503 and FRE 5508. Prerequisites: FRE 3780 or LIN 3010 or LIN 3013.

FRE 5735 Special Topics in Linguistics (3). Content to be determined by students and instructor. (Approval of Department required.)

FRE 5755 Old French Language (3). Introduction to the phonology, morphology, and syntax of the Old French language. Reading and analysis of the 12th and 13th century texts in their original. Comparison of major medieval dialects. Prerequisite: FRE 4840 or FRE 5845.

FRE 5845 History of the Language I (3). The internal and external history of the French language from Latin to Old French. Examination of some of the first texts written in French. Credit will not be given for both FRE 4840 and FRE 5845. Prerequisite: FRE 3780.

FRE 5846 History of the Language II (3). External and internal history of the French language from 1400 to the present. Examination of first dictionaries and grammars of French. Survey of recent linguistic legislation concerning the French language. Credit will not be given for both FRE 4841 and FRE 5846.

FRE 5855 Structure of Modern French (3). Systematic study of the phonology, morphology, syntax, and lexicon of Modern French. Taught in English. Credit will not be given for both FRE 4850 and FRE 5855.

FRE 5908 Independent Study (1-3). Project, field experience, readings, or research.

FRT 3800 Basic Translation Exercises (3). Emphasis on basic principles and practice application. Prerequisite: FRE 3421.

FRT 4801 Professional Translation (3). Techniques and resources for professional translation. Prerequisite: FRT 3800.

FRT 5805 Translation/Interpretation Arts (3). Techniques of professional translation and interpretation. Prerequisite: FRT 4801.

FRW 3200 French Literature I (3). Close reading and analysis of prose and poetry from the Middle Ages to the 17th Century.

FRW 3201 French Literature II (3). Close reading and analysis of French prose, theatre, and poetry, from the 18th to the 20th century. Prerequsities: FRE 3421 or FRE 4422.

FRW 3280 French 19th Century Novel (3). Four major novels by major 19th century novelists will be selected to illustrate the development of novelist techniques as well as of a different conception of the role of the novel that finally made it an important literary genre. Prerequisite: FRW 3810 or another FRW course.

FRW 3300 French Comedies (3). A study in French comedies from the 15th century to the 19th century, with special emphasis on Moliere's plays. Prerequisite: FRW 3200.

FRW 3323 French 19th Century Drama (3). Plays will be chosen to illustrate various literary movements in 19th century French drama: Romanticism, Realism, Naturalism, and Symbolism. Prerequisite: FRW 3200.

FRW 3370 French 19th and 20th Century Short Stories (3). Great short stories by Maupassant, Merimee, Flaubert, Camus, and Sartre will be studied to familiarize the student with literary criticism by a close reading and analysis of short texts. Prerequisite: FRE 3421.

FRW 3532 French Romantic Literature (3). A study of French Romantic generation through the works of Lamartine, Hugo, de Musset, etc. Prerequisite: FRW 3200.

FRW 3810 Literary Analysis (3). The identification and appreciation of techniques for sensitive reading and discussion of literary texts.

FRW 3905 Independent Study (3). Project, field experience, readings, or apprenticeship.

FRW 3930 Special Topics (3). Readings and discussion of literary/linguistic topics to be determined by students and instructor.

FRW 4123 Travel, Exile, and Cross-Cultural Encounters (3). Drawing on writings from the turn of the century to the present, explores the themes of exile and escape, of cultural and visual appropriations, the repetition and deconstruction of exotic cliches.

FRW 4212 French Classical Prose (3). Study of major works of 17th century French authors such as Descartes, Pascal, La Rochefoucauld, La Bruyere, etc. Prerequisites: FRW 3200, and another FRW course.

FRW 4218 18th Century French Prose (3). Major works by the 18th century French philosophes that illustrate the evolution of socio-political and aesthetic thought leading to the French Revolution. Prerequisites: FRW 3200 or FRW 3810 and another FRW course.

FRW 4272 French Novels from the Classical Period (3). A study of major 17th and 18th century French novels. Course conducted in French. Prerequisites: FRW 3200, and another FRW course.

FRW 4281 French 20th Century Novel (3). A detailed analysis of modern novels, and a general examination of the intellectual currents which these novels illustrate or express (e.g. surrealism, existentialism, nouveau roman, post-modernism. Prerequisites: FRW 3200, and another FRW course.

FRW 4310 Seventeenth-Century French Drama (3). A study of French classical aesthetics through the plays of Corneille, Moliere, and Racine. Prerequisites: FRW 3200, and another FRW course.

FRW 4324 French 20th Century Theatre (3). Focuses on the scope and variety of contemporary French theatre from Claudel, through existentialism and the theatre of the absurd, to Cixous and Cesaire. Prerequisites: FRW 3200, and another FRW course.

FRW 4390 Genre Studies (3). Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama).

FRW 4410 French Medieval Literature (3). A study in different literary forms prevalent during the 12th and 15th centuries. Read in modern French; course will be conducted in French. Prerequisites: FRW 3200, and another FRW course.

FRW 4420 Sixteenth-Century French Literature (3). A study of major authors of the French Renaissance, Rabelais, Ronsard, Montaigne, etc. Course conducted in French. Prerequisites: FRW 3810 or 3820, and another FRW course.

FRW 4583 Women Writers in French (3). Drawing on the writings of women authors in French, this course explores topics such as: the effects of narrative techniques on subject formation, the poetics of silence and of revolt, sexual difference versus cultural difference. Prerequisites: FRW 3810 or 3820, and another FRW course.

FRW 4590 Creative Modes (3). Discussion of a single mode or a plurality of epoch styles such as classical/baroque, realism/surrealism. The peculiar/common features of expressive media.

FRW 4750 Francophone Literature of Africa (3). Introduction to the Francophone literatures of Africa; study of a literary tradition in French, with special emphasis on post-World War II writers. Prerequisites: FRW 3200 or another FRW course.

FRW 4751 Francophone Literature in the Caribbean (3). Introduction to the Francophone literature of the Caribbean; study of a literary tradition in French, with special emphasis on post-World War II writers. Prerequisites: FRW 3200 or another FRW course.

FRW 4905 Independent Study (1-3). Project, field experience, readings, or research.

FRW 4930 Special Topics (3). Independent readings, research, or project.

FRW 5395 Genre Studies (3). Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama).

FRW 5934 Special Topics in Language Literature (3). Content and objectives to be determined by student and instructor.

FRW 5938 Graduate Seminar (3). Topic and approach to be determined by students and instructor. (Approval of the Department required.)

GER 1120 German I (5). Provides training in the acquisition and application of basic language skills.

GER 1121 German II (5). Provides training in the acquisition and application of basic language skills.

GER 2210 Intermediate German (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

GER 2240 German Intermediate Conversation (3). This course is designed to help students maintain and increase their conversational ability in the language while unable to continue the regular sequence. May be repeated twice. Prerequisite: GER 1121 or equivalent.

GER 3420 Review Grammar/Writing I (3). Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.

GER 4905 Independent Study (1-3). Project, field experience, readings, or research.

GER 4930 Special Topics (3). Independent readings, research, or project.

GER 5060 German for Reading Knowledge (3). Designed primarily for graduate students who wish to attain proficiency for M.A. or Ph.D. requirements. Open to any student who has no prior knowledge of the language.

GER 5061 German for Reading Knowledge (3). Emphasis on translation of materials from the student's field of specialization. Prerequisite: GER 5060 or the equivalent.

GET 3100 Literature in Translation (3). Masterpieces in German literature in English. Comparative use of the original text. Discussion and interpretation.

HAI 3213 Accelerated Haitian Creole (3). Emphasis on oral skills, contemporary language, and culture.

HAI 3214 Accelerated Intermediate Haitian Creole (3). Builds on accelerated course by continuing and expanding communicative activities. Prerequisites: Accelerated Haitian or permission of the instructor.

HAI 3500 Haiti: Language and Culture (3). Provides, from a multidisciplinary perspective, a general understanding of the Haitian culture and language.

HBR 1120 Hebrew I (5). Provides training in the acquisition and application of basic language skills.

HBR 1121 Hebrew II (5). Provides training in the acquisition and application of basic language skills.

HBR 2200 Intermediate Hebrew (3). Provides training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

ITA 1120 Italian I (5). Provides training in the acquisition and application of basic language skills.

ITA 1121 Italian II (5). Provides training in the acquisition and application of basic language skills.

ITA 2210 Intermediate Italian (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

ITA 2240 Italian Intermediate Conversation (3). This course is designed to help students maintain and increase their conversational ability in the language while unable to continue the regular sequence. May be repeated twice. Prerequisite: ITA 3131 or equivalent.

ITA 3420 Review Grammar/Writing I (3). Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.

ITA 4905 Independent Study (1-3). Project, field experience, readings, or research.

ITA 4930 Special Topics (3). Independent readings, research, or project.

ITT 3110 Literature in Translation (3). Masterpieces of Italian literature in English. Comparative use of the original text. Discussion and interpretation.

JPN 1120 Japanese I (5). Provides training in the acquisition and application of basic language skills.

JPN 1121 Japanese II (5). Provides training in the acquisition and application of basic language skills.

JPN 3210 Intermediate Japanese (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

LIN 3010 General Linguistics (3). Examination and synthesis of the concepts and perspectives of major contributions to language theory. Equivalent to SPN 3733. Students who take SPN 3733 may not receive credit for LIN 3010 or LIN 3013.

LIN 3200 Phonetics (3). The application of phonetic theory and practice for speech refinement. Study of sound patterns in communication and creative activity. Prerequisite: LIN 3010 or equivalent.

LIN 3610 Dialectology (3). Definition and analysis. Problem-solving in dialect classification. Prerequisite: LIN 3010 or equivalent.

LIN 4326 Contrastive Phonology (3). For students proficient in more than one foreign language. Choice of languages to be determined by students and instructor. Prerequisite: LIN 3010 or equivalent.

LIN 4433 Contrastive Morphology (3). For students proficient in more than one foreign language. Content and emphasis to be determined by students and instructor. Prerequisite: LIN 3010 or equivalent.

LIN 4620 Studies in Bilingualism (3). Readings and analysis of bilingual programs and binational goals. Prerequisite: LIN 3010 or equivalent.

LIN 4702 Applied Linguistics (3). Examination of available linguistic materials for self-instruction. Problem-solving in syntax and phonetics, through the application of modern/traditional methods. Prereq-uisite: LIN 3010 or equivalent.

LIN 4722 Problems in Language Learning (3). Primarily designed for prospective teachers, but open to all interested students. The course will aim to devise approaches to difficulties commonly experienced in syntax, usage, reading and comprehension. Prerequisite: LIN 3010 or equivalent.

LIN 4931 Special Topics in Linguistics (3). Provides the opportunity for students and instructor to explore topics not included in the regular course offerings. Content to be determined.

LIN 5207C Acoustic Phonetics (3). Introduction to principles of acoustic and instrumental phonetics, including the physics of speech sounds and use of the sound spectrograph and other instruments. Prerequisites: LIN 3010, LIN 3013, plus one additional course in phonetics or phonology. Corequisite: One of the prerequisites may be counted as a corequisite.

LIN 5601 Sociolinguistics (3). Principles and theories of linguistic variation with special attention to correspondences between social and linguistic variables.

LIN 5603 Language Planning: Linguistic Minority Issues (3). Introduction to the field of language planning. Minority linguistic issues in developing and developed nations: official languages, endangered languages, and language as problem and/or resource.

LIN 5604 Spanish in the United States (3). An examination of the sociolinguistic research into Spanish in the U.S.: varieties of Spanish, language attitudes, language contact and change, and aspects of language use. Prerequisites: Prerequisites: LIN 3010, LIN 3013, or SPN 3733.

LIN 5613 Dialectology (3). The geography of language variation: linguistic geography, atlases, national and regional studies. Dialectology within a modern sociolinguistic frame work; research approaches.

LIN 5625 Studies in Bilingualism (3). Readings and analysis of bilingual programs and binational goals.

LIN 5720 Second Language Acquisition (3). Research, theories, and issues in second language acquisition. Topics include the Monitor Model, the role of the first language, motivation, age, individual differences, code-switching, and the environment; affective variables and attitudes.

LIN 5760 Research Methods in Language Variation (3). Research in sociolinguistics, dialectology, bilingualism: problem definition, instrument design, data collection and analysis, including sampling techniques and statistical procedures. Prerequisite: LIN 5601, LIN 5625, LIN 5613 or other course in variation.

LIN 5825 Pragmatics (3). Study of the relationships between language form, meaning, and use. Special emphasis on speech act theory. Prerequisites: LIN 3010, LIN 3013, or SPN 3733.

(See English listing for additional Linguistics courses.)

POR 1000 Elementary Portuguese (3). Emphasis on oral skills, contemporary language, and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.

POR 1130 Portuguese I (5). Provides training in the acquisition and application of basic language skills.

POR 1131 Portuguese II (5). Provides training in the acquisition and application of basic language skills.

POR 2200 Intermediate Portuguese (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

POR 3230 Accelerated Portuguese I (5). Accelerated course for students fluent in Spanish. Encourages rapid acquisition by intensive exposure to the language through immersion activities, videos, and culture.

POR 3231 Accelerated Portuguese II (5). Accelerated course for students fluent in Spanish. Builds on Accelerated Portuguese I by continuing and expanding communicative activities. Prerequisite: POR 3230 or permission of the instructor.

POR 3240 Portuguese Intermediate Conversation (1). This course is designed to help students maintain and increase their conversational ability in the language while unable to continue the regular sequence. May be repeated twice. Prerequisite: POR 3231 or equivalent.

POR 3400 Advanced Oral Communication (3). Development of oral skills through a variety of activities: Readings and recitations, public speaking, debate, skits, video production and drama. Open to native and non-native speakers. Prerequisite: Oral communication ability in Portuguese.

POR 3420 Review Grammar/Writing I (3). Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.

POR 3421 Review Grammar/Writing II (3). Examination of grammatical theory; discussion of the modem essay. Practice in the detection and correction of errors in usage. The course will focus on current international events as content for informal talks and compositions.

POR 3440 Portuguese for Business (3). Presents the special language needs for conducting business in Portuguese, with emphasis on the commerce and culture of modern Brazil. Practice in correspondence, documents, and presentations.Prerequisite: POR 1131, POR 3230 or equivalent.

POR 3500 Luso-Brazilian Culture (3). Open to any student who understands Portuguese. The develop-ment of Portuguese speaking civiliza-tions, with emphasis on either Portugal or Brazil: history, art, music, daily life, impact on other cultures.

POR 3930 Special Topics in Language Linguistics (3). Readings, research, and discussion of topics in Portuguese language or linguistics to be determined by students and instructor.

POR 4470 Foreign Study: Advanced Language Literature (VAR). Up to a full semester credit for foreign residence and study/work. (Approval of Department required.)

POW 4390 Brazilian Cinema (3). An examination of Brazilian films and culture from Cinema Novo to the present. Focuses on the northeast, urban society, magic and the Amazon. Taught in Portuguese.

POW 4905 Independent Study (1-3). Project, field experience, readings, or research.

POW 4930 Special Topics (3). Independent readings, research, or project.

PRT 3401 Literature in Translation (3). Masterpieces of Portuguese literature in English. Comparative use of the original text. Discussion and interpretation.

RUS 1120 Russian I (5). Provides training in the acquisition and application of basic language skills.

RUS 1121 Russian II (5). Provides training in the acquisition and application of basic language skills.

RUS 2210 Intermediate Russian (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

SPN 1000 Elementary Spanish (3). Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.

SPN 1030 Elementary Spanish for Medical Personnel (5). Conversational elementary Spanish for medical personnel. Recommended for non-native speakers of Spanish who are in nursing or other health-related professions.

SPN 1120 Spanish I (5). Course designed specifically for beginning university students with no previous language study. Emphasis on oral Spanish and on acquiring basic language skills.

SPN 1121 Spanish II (5). Emphasis on oral Spanish and on acquiring basic language skills.

SPN 2200 Intermediate Spanish I (3). Provides intermediate training in the acquisition and application of basic language skills. Prerequisites: One year prior study or equivalent experience.

SPN 2201 Intermediate Spanish II (3). Last course of a four-semester sequence which implements a proficiency-oriented approach. Focuses on the development of listening and reading comprehension skills, and encourages maximum oral interaction and the practice of writing.

SPN 2210 Oral Communications Skills (3). Development of oral skills through skits, debates, and contextualized communication. Prerequisites: SPN 1121 or equivalent.

SPN 2230 Intermediate Readings in Spanish (3). Provides opportunities to develop fluency. Emphasis on selected literary and /or cultural readings; films and group activities intended to stimulate communication and enhance an understanding of Hispanic culture. Prerequisites: SPN 1121 or equivalent. Corequisite: SPN 2200 recom-mended.

SPN 2240 Intermediate Spanish Conversation (3). This course is designed to help students maintain and increase their ability in the language while unable to continue the regular sequence. May be repeated twice. Prerequisite: SPN 1121 or equivalent.

SPN 2270 Foreign Study (12). Intermediate level. One semester full-time credit for foreign residence and study. Individual cases will be evaluated for approval.

SPN 2340 Intermediate Spanish for Native Speakers (3). Improvement of spelling, grammar, vocabulary, reading, writing, and oral skills for Hispanic bilinguals educated in the U.S., with less than two years of formal training in Spanish but whose mother tongue is Spanish. Prerequisite: Ability to understand Spanish.

SPN 2341 Advanced Spanish for Native Speakers (3). Improvement of literacy skills through grammar review, composition, and selected readings of representative Hispanic writers, including Cuban, Puerto Rican, and Chicano authors. For U.S. Hispanic bilinguals with at least two years of formal training in Spanish. Prerequisite: SPN 2340 or permission of the instructor.

SPN 3013 Language Skills for Professional Personnel (1-3). The course is geared to the special linguistic needs of the community groups (medical, business, technical, etc.).

SPN 3031 Intermediate Spanish for Medical Personnel (3). Provides intermediate training in the acquisition and application of medical language skills. Prerequisite: SPN 1030 or permission of the instructor.

SPN 3301 Review Grammar and Writing (3). Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language. For non-native speakers.

SPN 3401 Advanced Conversation (3). Improvement of oral proficiency and listening comprehension skills, correction of accent, vocabulary building. Use of small group conversation, pronunciation tapes, and varied outside readings.

SPN 3410 Advanced Oral Communication (3). Development of oral skills through a variety of speaking and conversational activities: public speaking, debate, drama, recitation. For native speakers and advanced non-natives. Prerequisite: Oral ability in Spanish.

SPN 3413 Communication Arts (3). Oral interpretation and dramatic reading. Original and non-original texts will be the content of the course. Study of shared modes of experience and their individual linguistic expression in an acquired language.

SPN 3422 Advanced Grammar and Composition (3). To consolidate the student's command of oral and written Spanish. Advanced readings of authentic materials. Preparation and documentation of written monographs. For natives and advanced non-natives. Prerequisites: SPN 2341, SPN 3301 or equivalent.

SPN 3440 Spanish Business Composition/Correspondence (3). Training in the special writing needs of business: letter-writing, memoranda, brochures, advertising, proposals, declarations, government documents, etc.

SPN 3520 Spanish American Culture (3). Introduction to the major artistic and cultural phenomena in Latin America. Art, music, film, and literature will be discussed in their cultural context. Prerequisite: Ability to understand Spanish at advanced level.

SPN 3702 Applied Linguistics (3). Examination of available linguistic materials for self-instruction. Problem-solving in syntax and phonetics, through the application of modern/traditional methods. Prerequisite: LIN 3010 or equivalent. (Conducted in Spanish).

SPN 3733 General Linguistics (3). Examination and synthesis of the concepts and perspectives of major contributions to language theory. (Conducted in Spanish.) Equivalent to LIN 3010. Students who take LIN 3010 may not receive credit for SPN 3733 or LIN 3013.

SPN 3780 Phonetics (3). The application of phonetic theory and practice for speech refinement. Study of sound patterns in communication and creative activity. Prerequisite: LIN 3010 or equivalent.

SPN 3820 Dialectology (3). Definition and analysis. Problem-solving in dialect classification. Prerequisite: LIN 3010 or equivalent.

SPN 4312 Introduction to Spanish Syntax (3). An introduction to Spanish syntax. Topics include an introduction to syntactic analysis and syntactic phenomena of Spanish. Prerequisites: LIN 3010 or equivalent.

SPN 4470 Foreign Study: Advanced Language Literature (12). Full semester credit for foreign residence and study/work. (Approval of the Department required.)

SPN 4500 Spanish Culture (3). Open to any student who understands the target language. The development of a particular civilization. Emphasis on the evolution of a society, its ideas and its values.

SPN 4790 Contrastive Phonology (3). Contrasts in the sound systems of English and Spanish. Prerequisite: LIN 3010 or equivalent.

SPN 4802 Contrastive Syntax (3). Contrasts in the grammatical systems of English and Spanish with emphasis on structures with equivalent meanings. Recommended for students of translation and interpretation. Prerequisite: LIN 3010 or permission of the instructor.

SPN 4822 Hispanic-American Sociolinguistics (3). Language and society in Latin America. Sociolinguistic theory followed by consideration of specific language problems in Spanish and Portuguese speaking areas of the Americas. Prerequisite: LIN 3010 or equivalent.

SPN 4840 History of the Language (3). The internal and external history of language development. Examination of model texts from key periods of evolution. Prerequisite: LIN 3010 or SPN 3733 or equivalent.

SPN 4905 Independent Study (1-3). Project, field experience, readings, or research.

SPN 4930 Special Topics in Linguistics (3). Provides the opportunity for students and instructor to explore topics not included in the regular course offerings. Content to be determined.

SPN 4936 Senior Seminar (3). Topic and approach to be determined by students and instructor.

SPN 5060 Language for Reading Knowledge (3). Designed primarily for graduate students who wish to attain proficiency for M.A. or Ph.D. requirements. Open to any student who has no prior knowledge of the language.

SPN 5061 Language for Reading Knowledge (3). Emphasis on translation of materials from the student's field of specialization. Prerequisite: SPN 5060 or the equivalent.

SPN 5525 Spanish American Culture (3). A graduate survey of the major artistic phenomena in Latin America. Art, music, film, and literature will be discussed in their cultural context. Prerequisite: Graduate standing and permission of the instructor.

SPN 5536 Afro-Cuban Culture (3). Explores the role played by blacks in Cuban culture. Issues studied include: Afro-Cuban religions, languages, and music, as well as the Afro-Cuban presence in literature and the arts.

SPN 5537 Special Topics in Afro-Hispanic Culture (3). Close examination of various topics related to the culture of African diaspora groups in the Hispanic world.

SPN 5705 The Structure of Spanish (3). An introduction to Spanish linguistics. Topics include Spanish phonetics, phonology, morphology, and syntax. Students who have previously taken Syntactic Structures of Spanish and/or Sound Structure of Spanish will not receive credit for this course. Prerequisites: LIN 3010 or equivalent.

SPN 5725 Syntactic Structures of Spanish and English (3). An in-depth study of syntactic structures in Spanish and English, with an emphasis on how linguistic theory can account for the similarities and differences between the two languages. Prerequisites: LIN 3010 or equivalent.

SPN 5805 Morphological Structures of Spanish and English (3). A survey of the morphologies of Spanish and English. Topics include the difference between isolating and synthetic languages, rich vs. impo- verished agreement , and syntactic ramifications

of morphology. Prerequisites: LIN 3010 or equivalent.

SPN 5807 Syntactic Structures of Spanish (3). The study of syntactic structures in Spanish, topics include different syntactic approaches to current issues in Spanish syntax. Prerequisites: LIN 3010 or equivalent.

SPN 5824 Dialectology of the Spanish Caribbean (3). Study of varieties of Spanish used in the Caribbean area, including Miami-Cuban Spanish. The course will take historical and contemporary perspectives and will involve research among informants in South Florida. Prerequisites: LIN 3010 or equivalent.

SPN 5845 History of the Language (3). Historical development of the Spanish language, primarily from the point of view of internal linguistic change. Spanish as an example of general processes of language development. Prerequisites: LIN 3010, LIN 3013.

SPN 5908 Independent Study (1-3). Project, field experience, readings, or research.

SPT 3110 Literature in Translation (3). Masterpieces of Hispanic literature in English. Comparative use of the original text. Discussion and interpretation.

SPT 3800 Foundations to Translation Skills (3). Techniques of translation, in Spanish and English, applied to law, business, technology, and literature.

SPT 3812 Foundations of Interpreting (3). Exercises in sight translation, consecutive and simultaneous interpretation in Spanish and English. Theory and practice.

SPT 4801 Translation Practica (3). Translation of media, literary, and scientific texts.

SPT 4802 Practica in Oral Translation and Interpretation (3). Sight translation into and out of English. Introduction to the study of terminology. Prerequisite: SPT 3812 or permission of the instructor.

SPT 4803 Practica in Legal Translation (3). Provides advanced training in translating most commonly used legal documents in both civil and criminal procedures.

SPT 4804 Practice in Legal Interpretation (3). Training in consecutive and simultaneous interpretation of both civil and criminal legal proceedings before Federal and State courts.

SPT 4805 Translation in Communication Media (3). Provide insight into the techniques of translation of advertising, public relations and publicity materials to be used in the mass media such as print and broadcasting.

SPT 4806 Oral Skills for Interpreters (3). Voice production in sight translation, consecutive and simultaneous interpretation. Vocal projection, enunciation and phonetics, theory and practice. Extensive exercises in vocal control. Use of sound equipment. Prerequisite: SPT 3812.

SPT 4807 Practica in Business Translation (3). Business and language translation and the business world. Principles, techniques, and methods of business translation. Extensive practical exercises in translating routine business documents English to Spanish and vice versa. Prerequisite: SPT 3800.

SPT 4808 Practica in Technological Translation (3). Language and technology. The translator in the technological world. Principles, techniques, and methods of technological translation. Extensive practical exercises. Prerequisite: SPT 3800.

SPT 4809 Practica in Medical Translation (3). Medical language. The translator and the medical world. Principles, techniques and methods of medical translation. Extensive practical exercises in translating routine medical documents English to Spanish and vice versa. Prerequisite: SPT 3800.

SPT 4813 The Interpreter and Language (3). The interpreter as a linguistics expert. The stylistic levels of language. Legal jargon and street language in English and Spanish. Dialectal problems. Practical and ethnical problems. Prerequisite: SPT 3812.

SPT 4814 Conference Interpreting (3). Interpreting for international conferences and for diplomacy. Intensive practice in simultaneous interpretation. Prerequisite: SPT 3812.

SPT 4815 Interpreting for Business (3). The principles and techniques of interpreting in the context of a bilingual (Spanish/English) business setting. Consecutive, simultaneous interpretation and sight translation of business matters. Prerequisites: SPT 3800, SPT 3812 or permission of the instructor.

SPT 4820 Computer-Aided Translation (3). The translating machine and computer-aided translation. Machine operation. Selected applications of computer translating texts from various disciplines. Correction of translated texts with computers. Prerequisites: SPT 3800, CDA 2310, and permission of director of program.

SPT 4940 Judicial Translation-Interpretation Internship (3). Students will spend a semester working in state and federal courts under the supervision of a professor, in order to practice in situations in what they have learned. Prerequisites: SPT 3800, SPT 3812, SPT 4801, SPT 4803, SPT 4804, SPT 4806, and SPT 4807.

SPT 4941 Professional Translation-Interpretation Internship (3). Students will spend a semester working in state and federal courts under the supervision of a professor, in order to practice in situations in what they have learned. Prerequisites: SPT 3800, SPT 3812, and permission of the instructor.

SPT 5118 Literature in Translation (3). Masterpieces of world literature. Open to students who are proficient in more than one language.

SPT 5715 Hispanic Women Writers in Translation (3). Readings and analysis of Spanish and Spanish American women writers in translation. Emphasis on cultural and linguistic considerations involved in the translation of literary texts. Prerequisite: Graduate standing or permission of the instructor.

SPW 3130 Spanish American Literature (3). Close reading and analysis of prose, poetry and drama. Selections from Spanish American Literature. Prerequisite: SPN 3422 or equivalent and oral and written proficiency in Spanish.

SPW 3323 Garcia Lorca's Theatre (3). Readings from representative plays by Spain's finest dramatist of the 20th century, including his three well-known tragedies and a number of short comic plays. Discussion of such themes as social and individual justice and freedom; passion and repression; and the role of poetry in the theatre. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 3342 Twentieth Century Spanish Poets (3). Readings from selected poets of the 20th century, such as Antonio Machado, Miguel Hernandez, Damaso Alonso, and Rafael Alberti. Close examination of the poems representative of these poets, and their contribution to the development of Spanish poetry from the Generation of 1898 to the middle of the 20th century. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 3371 The Latin American Short Story (3). Readings from the 19th century authors and such 20th century masters as Borges, Cortazar, Cabrera Infante, Garcia Marquez, and Rulfo. Examination of short-story techniques and of such themes as social satire, the nature of reality, reason, and irrationally. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 3423 Masterworks of the Golden Age (3). Readings from selected masterpieces of the Spanish Renaissance and Baroque, such as La Celestina, Lazarillo de Tormes, and the short novels of Cervantes. Emphasis on satire and the representation of such human problems as freedom, poverty, and the rebellion of the individual. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 3520 Prose and Society (3). The dynamics of participation and alienation between prose writers and their environment. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 3604 Don Quijote (3). A careful reading and discussion of Cervantes' Don Quijote, with particular attention to its multiple meanings in human terms, its innovative contributions to the novel in Europe, and the author's use of irony, characterization, and humor. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 3720 The Generation of 98 (3). Based on the works of Azorin, Baroja, Ganivet, Machado, Maetzu, Unamuno, and Valle-Inclan. This course will emphasize the individual thrust each author makes to foster artistic revolution and human regeneration, within a society characterized by abulia and existentialist anxiety. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 3810 Literary Analysis (3). The identification and appreciation of techniques for sensitive reading and discussion of literary texts.

SPW 3820 Peninsular Spanish Literature (3). Close reading and analysis of prose, poetry, and drama. Selections from Spanish peninsular literature. Prerequisite: SPN 3422 or equivalent and oral and written proficiency in Spanish.

SPW 3930 Special Topics (3). Readings and discussion of literary/linguistic topics to be determined by students and instructor. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4152 European Literature in Translation (3). For students proficient in more than one foreign language. Content and focus to be determined by students and instructor.

SPW 4263 The Spanish Novel of the Nineteenth Century (3). Within the context of literature and society, representative Spanish novels of the epoch will be studied. Special attention will be given to Galdos and Clarin. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4271 The Spanish Novel of the 20th Century (3). A study of the genre in Spain before and after the Civil War. Emphasis will be on predominant narrative tendencies. Representative authors will be discussed, such as Cela, Laforet, Sender, Matute, Medio, and others. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4304 Latin American Theatre (3). A view of Latin American theatre from the 19th century to the present. Representative works of the most renown dramatists will be examined, with emphasis on the works of Usigili, Triana, Marques Wolff, and Diaz. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4324 Contemporary Spanish Drama: Buero Vallejo (3). Chronological readings from plays written between 1949-1980. Emphasis on dramatic reading. An examination of the evolution of dramatic art in the contexts of censorship and freedom. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4334 Golden Age Poetry (3). Selected readings from the major lyric poets of the 16th and 17th centuries. Special attention to the problems of contemporary readings of classical texts. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4343 Poetry of Garcia Lorca (3). Chronological examination of the major works of Spain's greatest poet. Special attention to the lyric and dramatic features. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4351 Spanish American Poetry I (3). A view of Spanish American poetry from the Pre-Colonial period until 1850. Representative works of the most renown poets will be examined, with emphasis on Ercilla, Sor Juana, Bello, Heredia, and Avellaneda. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4352 Spanish American Poetry II (3). A view of Spanish American poetry from 1850 to the present. Representative works of the important poets will be examined, and special attention will be given to Lezama Lima, Parra, Paz, and Vallejo. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4364 The Spanish American Essay (3). A study of the ideological and intellectual forces that have shaped the Spanish American thought, as expressed in the works of representative authors such as Rodo, Mallea, Martinez Estrada, Paz, Manach, and others. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4384 Spanish-American Literature Before Independence (3). Studies Spanish-American literature prior to Independence providing a general understanding of the development of literature from the Conquest to the Enlightenment. Prerequisite: SPW 3130 & SPW 3820 or permission of the instructor..

SPW 4390 Genre Studies (3). Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama). Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4424 Golden Age Drama (3). Close readings from the finest plays written in Spain's Golden Age by Lope de Vega, Calderon, Tirso, and others, including the Don Juan theme. An examination of theatre as stylized conformity and as protest literature in a highly controlled society. Prerequisite:

SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4440 18th Century Spanish Literature (3). Examines the most relevant poetry and prose produced by 18th century Spanish writers. Prerequisite: SPW 3130 & SPW 3820.

SPW 4460 Quevedo's Satire (3). An introduction to the literary world of Spain's great baroque poet, who created modern satire in Spanish. Prerequisite: A good understanding of Spanish. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4590 Creative Modes (3). Discussion of a single mode or a plurality of epoch styles such as classical/ baroque, realism/surrealism. The peculiar/common features of expressive media. Prerequisite: SPW 3130 or SPW 3820 or permission of the instructor.

SPW 4930 Special Topics (3). Independent readings, research, or project.

SPW 5408 Colonial Latin American Literature (3). The most important and representative literary works of Colonial Latin America from the Cronicas to Lizardi. Prerequisites: Upper level and graduate standing.

SPW 5155 Comparative Studies (3). Cross-over and distinctiveness in a multi-language problem, period, or aesthetic.

SPW 5237 The Traditional Spanish American Novel (3). Study and analysis of the traditional Spanish novel as a form of art, from 19th century Lizardi's El periquillo samiento, to 1950. The novels and authors studied are representative of 'costumbrismo', 'romanticismo', 'naturalismo', 'modernismo', and 'criollismo'.

SPW 5277 Twentieth Century Spanish Narrative (3). Analysis of the Spanish novel from Ferlosio's El Jarama to the present. The perspective will be focused within historical, social, and artistic context. Representative authors such as Cela, Martin Santos, Umbral, Delibes, Benet, Goytisolo, and others will be included.

SPW 5286 Contemporary Spanish American Novel (3). A study of the Spanish American Novel from 1950. The course will intensively and extensively focus on the novelists who are best known for their innovations, defining and analyzing the qualities which give originality and newness both in themes and language.

SPW 5346 Poetry of Jorge Guillen (3). Selected readings from the five volumes of Aire nuestro. Emphasis on the techniques of close reading and explication. Related selections from Guillen's literary criticism.

SPW 5358 Graduate Seminar: Prose and Poetry of Jorge Luis Borges' (3). Close readings of short stories and poetry. Emphasis on Borge's linguistic and cultural pluralism and the interplay of philosophy with fabulation.

SPW 5359 Graduate Seminar: Poetry of Pablo Neruda (3). Chronological examination of the major works of Chile's Nobel Laureate. Related readings from Neruda's Memories. Emphasis on the poet's linguistic and aesthetic innovations.

SPW 5387 Women and Poetry (3). Women as poets and the poeticized. Close reading of Peninsular and Latin American texts, 16th - 20th Century. Students examine the contributions of women and how they have been represented in poetry. Prerequisite: 4000 or 5000 level course in Hispanic Poetry.

SPW 5405 Medieval Spanish Literature (3). Readings in Medieval literature of Spain including the epic, the learned poetry of the XIIIth and XIVth Centuries, and the literature of Juan II's court. Prerequisites: Graduate standing and permission of the instructor.

SPW 5407 The Renaissance in Spain (3). Readings in the literature and cultural experssions of the Spanish Renaissance. Prerequisites: Graduate standing and permission of the instructor.

SPW 5425 Quevedo: Poetry (3). Close reading of selected poems by Spain's greatest baroque poet and creator of modern Spanish satire, including poems on love, death, and metaphysical concerns, and a wide range of humorous poems.

SPW 5426 Quevedo: Prose Satire (3). Close reading of selected satires in prose by Spain's greatest baroque satirist and creator of modern Spanish satire. Includes Quevedo's picaresque novel El Buscon, and his Suenos, or Visions of Hell.

SPW 5428 Theatre in Calderon and Lope (3). The creation of verbal theatrical technique in the Baroque masters Calderon de la Barca and Lope de Vega.

SPW 5436 Poetry Writing in Spanish (3). Readings from Spanish and Latin American texts; description and recreation of traditional and experimental metrics. Students will exchange critiques of original poems. Prerequisites: sample of unpublished poems; wordprocessing literacy; permission of the instructor.

SPW 5475 19th Century Latin American Literature (3). A study of the main literary works of spanish speaking 19th Century Latin America: Romanticism, Realism, Naturalism and Modernism. Prerequisites: Upper level and graduate standing.

SPW 5486 Modern Spanish Women Writers (3). Analysis of narrative works by Spain's most representative women writers from the 19th century to the present. Emphasis on the novel. Includes works by Pardo Bazan, Matute, Laforet, Martin Gaite. Prerequisites: Graduate standing or permission of the instructor.

SPW 5515 Advanced Studies in Hispanic Folklore (3). Studies the oral literary and linguistic tradition of the Hispanic world. Prerequisites: Graduate standing and permission of the instructor.

SPW 5556 Spanish Realism and Naturalism (3). Readings in Spanish XIXth Century Novel of Realism and Naturalism including Alarcon, Perez Galdos, Pardo Bazan, Clarin and Blasco Ibanez. Prerequisites: Graduate standing and permission of the instructor.

SPW 5575 Spanish American Modernism (3). An in-depth study of prose and poetry of one of the most important periods of Spanish American literature, focusing on Marti, Dario, Najera, Casals, Silva, Valencia, Lugones, and Herrera y Reissig.

SPW 5595 Magical Realism and Typologies of Non-Realist Fiction (3). Theories of magical realism, fantastic and non-realist fiction, focusing on narrative technique. Authors may include Onetti, Borges, Cortázar, Asturias, Carpentier, Rulfo, Márquez, Allende or others. Prerequisite: Graduate standing or permission of the instructor.

SPW 5606 Cervantes (3). A comprehensive introduction to the masterpieces of Cervantes as the creator of the modern novel, and to critical theories about his art.

SPW 5729 Major Writers of the Generation of '98 (3). Study of the social and political circumstances of Spain at the turn of the XIX Century, and analysis of the work of Ganivet, Azorin, Baroja. Machado, Maeztu, Unamuno and Valle-Inclan. Prerequisite: Graduate standing or permission of the instructor.

SPW 5735 Hispanic Literature of the United States (3). Readings in the literature of Hispanics in the United States. Prerequisites: Graduate standing and permission of the instructor.

SPW 5756 Mexico in Poetry (3). Close reading of modern poets; discussion of essays on Theory and Practice. Students examine national representation in Myth, symbol and metaphor. Prerequisites: 4,000 or 5,000 level course in Culture of Literature.

SPW 5781 The Representation of women in Spanish Literature and Film (3). Study of cinematographic adaptations of Spanish novels, plays and short stories. Analyzes the representation of the female subject in both literary and filmic works. Prerequisite: Graduate standing or permission of the instructor.

SPW 5806 Methods of Literary Research (3). Introduction to bibliography, methods of research, the composition of essays, rhetoric, and the presentation of documentation. Theory of literary criticism, and its practical application to texts in Spanish.

SPW 5934 Special Topics in Language/Literature (3). Content and objectives to be determined by student and instructor.

School of Music

Fredrick Kaufman, *Professor and Director (composition)*
John Augenblick, *Associate Professor (choral)*
Kristine Burns, *Assistant Professor (composition/electronic music)*
Gary Campbell, *Assistant Professor (saxophone)*
John Cuciurean, *Assistant Professor (theory)*
Robert Davidovici, *Professor/Artist-in-Residence (violin)*
Robert B. Dundas, *Assistant Professor (voice/opera)*
J. Richard Dunscomb, *Professor (jazz)*
Karen Fuller, *Lecturer and Director Of Performing Arts Production*
Orlando J. Garcia, *Associate Professor and Director, Graduate Programs (composition)*
Roby George, *Assistant Professor and Director of Wind Studies*
David J. Greennagle, *Assistant Professor (music education)*
Clair McElfresh, *Professor Emeritus (choral)*
Michael Orta, *Assistant Professor (jazz piano)*
Carlos Piantini, *Professor and Director of Orchestral Studies (orchestra)*
Joseph Rohm, *Associate Professor (theory)*
Miguel Salvador, *Associate Professor (piano)*
Arturo Sandoval, *Professor/ Artist-in-Residence (trumpet)*
Susan Starr, *Professor/ Artist-in-Residence (piano)*
Violet Vagramian-Nishanian, *Professor (theory, piano accompanying, history)*
Michael Wagner, *Professor (music education)*

Miami String Quartet
Ivan Chan, *(violin)*
Chauncey Patterson, *(viola)*
Cathy Meng Robinson, *(violin)*
Keith Robinson, *(cello)*

Adjunct Instructors:
Jay Bertolet, *tuba*
Lindsey Blair, *jazz guitar*
Judith Burganger, *piano*
Jason Carder, *jazz trumpet*
Brian Conaster, *piano/accompanying*
Elizabeth M. Cowan, *voice*
John de Lancie, *Visiting Artist-in Residence, oboe*
Marcia Dunscomb, *jazz history*
Michele Fernandez, *woodwind techniques*
Deborah Fleisher, *harp*
Felix Gomez, *jazz piano*
Luis Gomez-Imbert, *string bass*
Robert Grabowski, *jazz history*
Paul Green, *clarinet/chamber music*
James Hacker, *trumpet/chamber music*
Geoffrey Hale, *bassoon*
Cliff Huxford, *French horn*
Jonathan Joseph, *jazz drums*
Katherine Kozak, *opera vocal coach*
Lisa LaCross, *flute*
Jose Lopez, *piano/accompanying*
Sam Lussier, *jazz arranging*
Dean Manning, *organ*
Dennis Marks, *jazz bass*
Brian Mills, *theory*
Louis Mowad, *classical guitar.*
Hector Nesiosup, *Latin percussion*
Nicky Orta, *jazz bass*
Edward Pierson, *voice*
Nobleza Pilar, *voice*
Errol Rackipov, *jazz vibes*
Roberta Rust, *piano*
Samuel Sanders, *Visiting Professor of Piano*
Art Sares, *trombone*
Myer Savits, *music education*
Loretta Scherperal, *organ*
Joann Schulte, *organ*
Henry Skolnick, *bassoon*
Cheryl Star, *flute*
Lee Stone, *string techniques*
John Tafoya, *percussion*
Nestor Torres, *jazz flute*
Carlos Vega, *saxophone*

Bachelor of Music

Degree Program Hours: 128

A Bachelor of Music degree is offered with an emphasis in one or more of the following areas: Applied Music, Composition, Jazz Studies, and Music Education (students will take a dual major in Music and Music Education - see Music Education in the College of Education for specific requirements).

All entering students must provide evidence of performance ability (vocal or instrumental) through an audition. Contact the Music Department at (305) 348-2896 for more information or to schedule an audition.

Freshman/Sophomore Admission

Freshman admission requires an audition and placement test in Music Theory. Contact the Music Department at 348-2896 for an audition appointment.

Transfer Admission

To qualify for admission to the program, FIU undergraduates must meet all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Music students at the University come from a wide variety of academic backgrounds from Florida, other states and countries. Because of this diversity, the Faculty of Music gives basic preliminary examinations in order to assist the student to eliminate any deficiencies:

1. Music History - consisting of all periods of history.
2. Music Theory - consisting of sightsinging, melodic and harmonic dictation and written harmonization and analysis.

Common Prerequisites

MUT 1111	Music Theory I
MUT 1112	Music Theory II
MUT 2116	Music Theory III
MUT 2117	Music Theory IV
MUT 1221	Sightsinging I
MUT 1222	Sightsinging II
MUT 2226	Sightsinging III
MUT 2227	Sightsinging IV
MVK 1111	Class Piano I
MVK 1112	Class Piano II
MVK 2121	Class Piano III
MVK 2122	Class Piano IV

Four hours in one of the following:

MUN 1140	Symphonic Wind Ensemble
	or
MUN 1210	Orchestra
	or
MUN 1310	Concert Choir

Eight hours of applied lessons

Required for the degree:

MUC 1342 MIDI Technology

Ethnomusicology (3)

MUH 3052	Music of the World	3
	or	
MUH 3541	Music of the Americas: Folklore & Beyond	3

Four instances of successful completion in the following:

MUS 1010 Recital Attendance

Junior/Senior Year Areas of Emphasis

The following are Junior/Senior Year areas of emphasis for Music students. Nine hours in elective courses outside the department are required by the College. Admission to each area is by faculty approval.

Area I : Instrumental Performance (54)

Required Courses

Theory: (9)

MUT 3611	Form and Analysis	3
MUT 3401	Counterpoint	3
MUT 4311	Orchestration	2-3

History: (9)
MUH 3211 Music History Survey I 3
MUH 3212 Music History Survey II 3
MUH 3371 Twentieth Century Music: Exploration 3
Ethnomusicology (3)
MUH 3052 Music of the World 3
or
MUH 3541 Music of the Americas: Folklore & Beyond 3
Ensembles (8)
Two credits each semester enrolled in Applied Music (to be determined by advisor) 8
Major Applied (8)
Four semesters 2 credits each semester 8
Conducting (2)
MUG 4101 Basic Conducting 1
MUG 4302 Instrumental Conducting 1
Recitals: (0)
Junior Recital 0
Senior Recital 0

Recital Attendance (0)

To be taken each semester enrolled in Applied Music
MUS 3040 Recital Attendance 0
Electives
Music Electives 6
Electives outside the major 9

Area II: Vocal Performance (55)

Required Courses
Theory: (6)
MUT 3401 Counterpoint 3
MUT 3611 Form and Analysis 3
History: (9)
MUH 3211 Music History Survey I 3
MUH 3212 Music History Survey II 3
MUH 3371 Twentieth Century Music: Exploration 3
Ethnomusicology (3)
MUH 3052 Music of the World 3
or
MUH 3541 Music of the Americas: Folklore & Beyond 3
Ensembles (8)
Two credits each semester enrolled in Applied Music including four semester of Opera Workshop. Others to be determined by Advisor.
Major Applied (8)
MVV 3431 Junior Prin App 2
MVV 3431 Junior Prin App 2
MVV 4441 Senior Prin App 2
MVV 4441 Senior Prin App 2
Conducting (2)
MUG 4101 Basic Conducting 1
MUG 4202 Choral Conducting 1
Recitals: (0)
MVV 3970 Junior Recital 0
MVV 4971 Senior Recital 0

Recital Attendance

To be taken each semester enrolled in Applied Music
MUS 3040 Recital Attendance 0
Diction for Singers (4)
MUS 2211 English Diction 1
MUS 2221 French Diction 1
MUS 2231 German Diction 1
MUS 2241 Italian Diction 1
Electives (chosen in consultation with area advisor)
Music Electives 6
Electives outside the major 9

Area III: Composition (56)

Required Courses
Theory: (9)
MUT 3401 Counterpoint 3
MUT 3611 Form and Analysis 3
MUT 4311 Orchestration 3
History: (9)
MUH 3211 Music History Survey 3
MUH 3212 Music History Survey 3
MUH 3371 Twentieth Century Music: Exploration 3
Ethnomusicology (3)
MUH 3052 Music of the World 3
or
MUH 3541 Music of the Americas: Folklore & Beyond 3
Ensembles (6)
At least one ensemble each semester enrolled in Applied Music, including four semesters of New Music Ensemble, others to be determined by advisor.) 6
Conducting (2)
MUG 4101 Basic Conducting 1
MUG 4202 Choral Conducting 1
or
MUG 4302 Instrumental Conducting 1
Principal Applied (4)
Four semesters, 1 credit each semester 4
Composition:[1] (10)
MUC 2221 Composition I 2
MUC 2222 Composition II 2
MUC 3231 Composition III 2
MUC 3232 Composition IV 2
MUC 4241 Composition V 2
MUC 4932 Composition Forum 0
Completion of four semesters of Composition Forum is required for graduation.
Electronic Music: (4)
MUC 2301 Electronic Music Lab I 2
MUC 3302 Electronic Music Lab II 2
Recital Attendance (0)
To be taken each semester enrolled in Applied Music
MUS 3040 Recital Attendance 0
Recitals:[2] (0)
Composition Recital 0
Senior Recital 0
Electives outside the major 9

[1] MUC 2221 and 2222 (4 credits) should be taken during the sophomore year.

[2] Composition students must present a 45 minute recital of their works and a 30 minute performance recital. A final oral exam administered after the composition recital must also be successfully completed. Composition students must earn a "B" or better in all theory, composition, and electronic music courses.

Area IV: Commercial/Jazz Performance (56)

Required Courses
Theory: (13)
MUT 4311 Orchestration 2-3
MUT 4353 Jazz Arranging 2
MUT 2641 Jazz Improvisation I 2
MUT 2642 Jazz Improvisation II 2
MUT 4643 Jazz Improvisation III 2
MUT 4663 Jazz Styles and Analysis 2
History: (9)
MUH 3212 Music History Survey II 3
MUH 3371 Twentieth Century Music: Exploration 3
MUH 2116 Evolution of Jazz 3
Ethnomusicology (3)
MUH 3541 Music of the Americas: Folklore & Beyond 3
or
MUH 3052 Music of the World 3

Additional Music Courses: (20)

Ensembles (8)
Two credits each semester enrolled in Applied Music (To be determined by advisor) 8
Jazz Applied[1] **(8)**
Four semesters major jazz applied 7
Conducting (3)
MUG 4101 Basic Conducting 1
MUG 4202 Choral Conducting 1
or
MUG 4302 Instrumental Conducting 1
MUN 4784 Jazz Rehearsal Techniques 1
Recitals
MVJ 4971 Senior Jazz Applied Recital 0
MVJ 3970 Junior Jazz Recital 0
Recital Attendance
(To be taken each semester enrolled in Applied Music)
MUS 3040 Recital Attendance 0
Commercial/Jazz (3)
MUM 4301 Business of Music 1
MUH 1018 Intro to Jazz Studies 2
Electives: (9)
To be determined by advisor

[1] Piano majors will take four credits (two years) of Classical Applied Piano instead of Class Piano.

[2] Drummers Entering without Classical Applied Percussion will take four

credits (two years) of Classical Applied Percussion.

[3]Electric Bass Majors will take two credits (1 year) of Applied String Bass.

Area V: Piano Performance (55)

Required Courses

Theory: (9)

MUT 3611	Form and Analysis	3
MUT 3401	Counterpoint	3

History: (15)

MUH 3211	Music History Survey I	3
MUH 3212	Music History Survey II	3
MUH 3371	20th Century Music	3
MUH 3052	Music of the World	3
MUH 4400	Keyboard Literature	3

Ensembles: (8)

Two semesters of large ensemble: Choir, Wind Ensemble or Orchestra.

MUN 3463	Chamber Music (two semesters)	2
MUN 4513	Accompanying (four semesters)	4

Major Applied (8)

Four semesters, two credits each semester.

Conducting (1)

MUG 4101	Basic Conducting	1

Pedagogy (2)

MVK 4640	Piano Pedagogy	2

Recitals (0)

Junior Recital	0
Senior Recital	0

Recital Attendance (0)

MUS 3040	0

To be taken each semester enrolled in Applied Music

Electives

Music Electives	6
Electives outside of major	9

Minor in Music

A Minor in music requires 18 credits of music courses to be selected in consultation with the Director of the School of Music.

Minor in Music Composition

A minor in composition is available for students receiving the BM degree in areas of studies other than composition (e.g. jazz studies, applied, music education). In order to receive credit for a minor in composition students must successfully complete the following:

Courses

Theory

(beyond Freshman/Sophomore Theory and Sight Singing)

MUT 3611	Form and Analysis	3
MUT 4311	Orchestration	3
MUT 3401	Counterpoint	3

Composition

(beyond Basic Music Composition)

MUC 2221	Composition I	2
MUC 2222	Composition II	2

Electronic Music

(beyond MIDI Technology)

MUC 2301	Electronic Music I	2
MUC 33	Electronic Music II	2

Forum

MUC 4932	Composition Forum (2 semesters)	0

Ensemble

MUN 2490	New Music Ensemble (1 semester)	1
Total		18

Bachelor of Science in Music Education: Grades K-12

Degree Program Hours: 134-135

The Bachelor of Science in Music Education degree is offered by the School of Music, within the College of Arts and Sciences. Changes of the curriculum, including new and revised courses, are done in collaboration with the College of Education to ensure compliance with certification and accreditation requirements. **Application for this major must be made to the School of Music before admittance. An audition, theory, and piano placement exams are required prior to admittance.** Any questions concerning this degree should be directed to Dr. David J. Greennagel (Program Head) 305-348-6217 or to Fredrick Kaufman, Director of the School of Music 305-348-2896.

Theory (12 credits)

MUT 1111	Music Theory I	3
MUT 1112	Music Theory II	3
MUT 2116	Music Theory III	3
MUT 2117	Music Theory IV	3

Sightsinging (4 credits)

MUT 1221	Sightsinging I	1
MUT 1222	Sighysinging II	1
MUT 2226	Sightsinging III	1
MUT 2227	Sightsinging IV	1

Class Piano (2 credits)

MVK 1111	Class Piano I
MVK 1112	Class Piano II

Music Education majors must pass the Piano Proficiency; Class Piano III and IV until proficiency is pass.

Music History (12 credits)

MUH 3052	Music of the World	3
MUH 3211	Music History Survey I	3
MUH 3212	Music History Survey II	3
MUH 3371	20th Century Music	3

Music Technology (2 credits)

MUC 1342	MIDI Technology	2

Applied Music (11 credits)

Music Education majors are required to take two (2) credits of Applied Lessons each semester of their freshman and sophomore years, and one (1) credit each semester of junior year, and one (1) credit the semester not Student Teaching in the senior year.

Senior Recital (0 credits)

Music Education majors present their Senior Recital in the senior semester when not Student Teaching.

Ensembles (14 credits)

Music Education majors are required to take one major and one minor ensemble each semester. Music Education majors are not required to take ensembles while Student Teaching.

Recital Attendance (0 credits)

To be taken each semester enrolled in Applied Music.

Professional Foundation in General Education (26)

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology	3
EDG 3321	Instructional Decision Making	3
EDG 3321L	Instructional Decision Making Lab	2
EDG 3004	Educational Psychology	3
EDF 3515	Philos and Hist Foundations in Education	3
EDF 4643	Cultural and Social Foundations in Education	3

[1]Requires field experience of 15 clock hours outside of class time.

At least one course taken to meet the natural science requirements in General Education and/or prerequisites must include a laboratory component.

In addition to EDG 2701, students must take 6 credit hours with an international or diversity focus in lower division.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, minimum ACT, or SAT scores, completed 60 semester hours, 2.5 GPA, and must be otherwise acceptable into the program.

Music Education majors choose either the choral or Instrumental Track for Conducting and Techniques course: 5 credits:

Choral Music Education

Conducting (2 credits)

MUG 4101	Basic Conducting	1
MUG 4301	Choral Conducting	1

Music Education Techniques (3 credits)

MVV 1111	Class Voices I*	1
MVV 2121	Class Voice II*	1
MVV 3630	Vocal Pedagogy**	2
MVS 1116	Guitar Skills	1

**Piano and Guitar majors only*
***Voice majors for two credits, Piano/Guitar majors for one credit*

OR

Instrumental Music Education

Conducting (2 credits)

MUG 4101	Basic Conducting	1
MUG 4202	Instrumental Conducting	1

Music Education Techniques (3 credits)

MUE 2440	String Techniques***	1
MUE 2450	Woodwind Techniques***	1
MUE 2460	Brass Techniques***	1
MUE 2470	Percussion Techniques***	1

****Students are exempted from their major applied tech course*

AND

Professional Foundation in Music Education (14 credits)

(Choral and Instrumental)

MUE 3340	Elementary Music Methods	3
MUE 4341	Secondary Music Methods	3
MUE 4940	Student Teaching in Music Education	9

Note: MUE 4940 is taken the semester following MUE 3340 and MUE 4341.

Course Descriptions

Definition of Prefixes

HUM-Humanities; MUC-Music: Composition; MUE-Music: Education; MUG-Music: Conducting; MUH-Music: History/Musicology; MUL-Music: Literature; MUM-Music: Commercial; MUN-Music: Ensembles; MUS-Music; MUT-Music: Theory; MVB-Applied Music/Brass; MVK-Applied Music-Keyboard; MVJ-Applied Music/Jazz; MVP-Applied Music/Percussion; MVS-Applied Music/Strings; MVV-Applied Music/Voice; MVW-Applied Music/Woodwinds.

MUC 1101 Basic Music Composition (1). Elementary principles of composition including the performance of composition projects. Course includes calligraphy and notation skills. Course may be repeated for credit. Prerequisites: Freshman music majors; permission of the instructor.

MUC 1342 MIDI Technology (2). Introduction to the MIDI protocol and MIDI-based software, including music notation, sequencing, patch editing, ear training, and keyboard skills software. Prerequisites: Music major or permission of the instructor.

MUC 2221 Composition I (2). Creative writing utilizing 20th century compositional techniques in Impressionism, Neoclassicism, Post Webern Serialism, Indeterminacy, Minimalism, Mixed, Multi and Inter media, etc. Prerequisite: MUT 1112. Corequisites: MUT 2116.

MUC 2222 Composition II (2). Continuation of MUC 2221. Prerequisite: MUC 2221. Corequisites: MUT 2117.

MUC 2301 Electronic Music Lab I (2). Exploration of the electronic medium including the history of electronic music, digital studio techniques, analog studio techniques, digital synthesis and analog synthesis. Prerequisite: MUC 1342.

MUC 3231 Composition III (2). A continuation of Composition I to further the development of students compositional abilities through the writing of more evolved works with regard to duration, instrumentation. Prerequisites: MUC 2222 and admission to composition area.

MUC 3232 Composition IV (2). Continuation of MUC 3231. Prerequisite: MUC 3231.

MUC 3302 Electronic Music Lab II (2). A continuation of Electronic Music Lab I with an emphasis on advanced MIDI applications including samplers, digital sequencing, digital signal processing and interactive MIDI software. Includes one large composition project. Prerequisite: Electronic Music Lab I.

MUC 4241 Composition V (2). Continuation of MUC 3232. Prerequisite: MUC 3232.

MUC 4242 Composition VI (2). Continuation of MUC 4241. Prerequisite: MUC 4241.

MUC 4400 Electronic Music Lab III (2). Special projects in advanced electronic music programming environments including Csound, MAX, Interactor, HMSL and CHANT. Includes one large composition project. Can be repeated four times. Prerequisite: Electronic Music Lab II and permission of the instructor.

MUC 4932 Composition Forum (0). Student composers' works are critiqued by faculty; topics of interest to composers are discussed. Required of all students taking Composition III and higher. Prerequisite: Admission to Composition Program.

MUC 5406 Electronic Music IV (2). An advanced course in computer music providing students hands-on experience with recently developed hardware and software for the creation of music. Prerequisite: MUC 4400.

MUC 5407 Electronic Music V (2). Students develop new hardware and/or software for uses related to musical composition. Prerequisite: MUC 5406.

MUC 5935 Composition Forum (0). Student composers present their work for critique by faculty and topics relevant to composition are presented by faculty and guests. Prerequisite: Admission into the graduate composition program.

MUE 2440C String Techniques (1). Class instruction of string instruments; tuning and care of instruments; teaching techniques, fingerings, bowings; violin, viola, cello and double bass.

MUE 2450C Woodwind Techniques (1). Class instruction of woodwind instruments; tuning and care of instruments. Teaching techniques. Single reed instruments, double reed instruments, and flute. Class one hour, laboratory one hour.

MUE 2460C Brass Techniques (1). Class instruction of brass instruments; tuning and care of instruments. Teaching techniques. Piston and valve instruments, french horn, and trombone. Class one hour, laboratory one hour.

MUE 2470C Percussion Techniques (1). Class instruction of percussion instruments; sticking techniques; care of instruments; teaching techniques. Drum and mallet instruments. Class one hour, laboratory one hour.

MUE 3340 Elementary School Teaching Methods (3). Development of instructional skills, techniques, and strategies for elementary school classroom music for the music teacher. laboratory and field work required.

MUE 3921 Choral Conducting Workshop (3). The study of various topics related to choral literature, conducting and techniques. Prerequisite: Permission of the instructor.

MUE 3922 String Workshop (3). The study of various topics related to string literature, conducting and techniques. Prerequisite: Permission of the instructor.

MUE 3923 Instrumental Conducting Workshop (3). The study of various topics related to instrumental ensemble literature, conducting and techniques. Prerequisite: Permission of the instructor.

MUE 3924 Jazz Workshop (3). The study of various topics related to jazz literature, conducting and techniques. Prerequisite: Permission of the instructor.

MUE 4940 Student Teaching in Music Education (9). Supervised teaching in an elementary and secondary school. Prerequisite: Admission to the program.

MUE 5921 Choral Conducting Workshop (3). The study of various topics related to choral literature, conducting and techniques. Prerequisite: Permission of the instructor.

MUE 5922 String Workshop (3). The study of various topics related to string literature, conducting and techniques. Prerequisite: Permission of the instructor.

MUE 5923 Instrumental Conducting Workshop (3). The study of various topics related to instrumental ensemble literature, conducting and techniques. Prerequisite: Permission of the instructor.

MUE 5924 Jazz Workshop (3). The study of various topics related to jazz literature, conducting and techniques. Prerequisite: Permission of the instructor.

MUE 5928 Workshop in Music (2). Applications of materials and techniques in music in a laboratory or field setting.

MUG 4101 Basic Conducting (1). A basic conducting course to gain fundamental technique and interpretation. A prerequisite for both advanced instrumental and choral conducting.

MUG 4202 Choral Conducting (1). With a background in basic theory, and having performed in ensembles, the student will develop techniques of group conducting including madrigal, glee, choir, etc. A survey of choral literature will be included. Prerequisite: MUG 4101.

MUG 4302 Instrumental Conducting (1). With a background in basic theory, and having performed in ensembles, the student will develop a knowledge of baton technique, score reading, and interpretation. Prerequisite: MUG 4101. Corequisites: Orchestra or wind ensemble or both.

MUG 5105 Advanced Conducting Techniques (1). An extension of form and analysis, with interpretation both in instrumental and choral conducting. Twentieth century scoring and symbol interpretation will be studied in depth, with actual conducting experience required.

MUG 5205 Graduate Applied Choral Conducting (2). Advanced study of choral conducting, including gesture, rehearsal techniques, and repertoire. Prerequisite: Graduate standing and permission of the instructor.

MUG 5307 Graduate Applied Wind Conducting (2). Advanced study of wind conducting, including gesture, rehearsal techniques, and repertoire. Prerequisite: Graduate standing and permission of the instructor.

MUG 5935 Conducting Seminar (1). An examination of the principle issues of conducting, emphasizing score reading and study, rehearsal, interpretation, and contemporary techniques. Prerequisite: Graduate standing and/or permission of the instructor.

MUH 1011 Music Appreciation (3). Lives and creations of great composers in various periods of history. A multimedia course.

MUH 1018 Introduction to Jazz Studies (2). An introductory study of jazz music and musicianship. Required of all students who have been accepted into the Commercial/Jazz Studies program.

MUH 1560 African American Music (3). Examines the historical influence and development of African American music from its African roots to its dominance in the American popular culture.

MUH 2116 Evolution of Jazz (3). A history course that surveys jazz styles from mid-19th century to the present. A sociological and musical look at jazz, the personalities and their experience.

MUH 3019 History of Popular Music in the U.S. (3). Overview of Afro-American and Euro-American popular music and its historical development. Examination of musical style and social context in lecture-discussion format with film and video.

MUH 3052 Music of the World (3). Survey of folk, popular and classical musical traditions from around the world. Examination of musical style and social context with film and performance demonstrations.

MUH 3060 Latino Music in the United States (3). Survey of Latin American musical tradition brought through immigration. Examination of musical style and social context in lecture-discussion format with film and performance demonstrations.

MUH 3061 Music of Mexico and Central America (3). A survey of folk, popular and classical musical traditions in the region. Examination of musical style and social context in lecture-discussion format with film and performance demonstrations.

MUH 3062 Music of the Caribbean (3). Survey of folk, popular and classical musical traditions and their ongoing connection with Caribbean populations in the U.S. Class includes film and performance demonstrations.

MUH 3211 Music History Survey I (3). A survey of music from antiquity to 1750. Lectures on historical styles will be supplemented with slides, recordings, and musical analysis. Prerequisite: MUT 2227 & MUT 2117 or permission of the instructor.

MUH 3212 Music History Survey II (3). A survey of music from 1750 to the present. Lectures on historical styles will be supplemented with slides, recordings, and musical analysis. Prerequisite: MUT 2227 & MUT 2117, or permission of the instructor.

MUH 3371 Twentieth Century Music: Exploration (3). An exploration of music since 1900. Lectures on style plus demonstrations will be supplemented with recordings and analysis. Prerequisites: MUH 3211 and MUH 3212.

MUH 3541 Music of Latin America: Folklore and Beyond (3). An overview of the orchestral, chamber, solo, vocal, and electronic music from Latin America written in the 20th century and its relationship to the folk music of the region.

MUH 3801 Jazz History (2). An in-depth study of jazz music from its inception to the present day. Specifically designed for music majors, in particular Jazz Studies students. Prerequisites: MUT 1112, MUT 1222.

MUH 4680 Music History Seminar I (2). Emphasizes both historical and theoretical analysis. Scholarly work under faculty direction, develops written skills and research methods. Written project required. Prerequisite: MUH 3211, MUH 3212, and permission of the instructor.

MUH 4681 Music History Seminar II (2). Emphasizes both historical and theoretical analysis. Scholarly work under faculty direction, develops written skills and research methods. Written project required. Prerequisite: MUH 4680 or permission of the instructor.

MUH 4682 Music History Seminar III (2). Emphasizes both historical and theoretical analysis. Scholarly work under faculty direction, develops written skills and research methods. Written project required. Prerequisite: MUH 4681.

MUH 4683 Music History Seminar IV (2). Emphasizes both historical and theoretical analysis. Scholarly work under faculty direction, develops written skills and research methods. Written project required. Prerequisite: MUH 4682.

MUH 5025 History of Popular Music in the U.S. (3). Overview of Afro-American and Euro-American popular music and its historical development. Examination of musical style and social context in lecture-discussion format with film and video.

MUH 5057 Music of the World (3). Survey of folk, popular and classical musical traditions from around the world. Examination of musical style and social context with film and performance demonstrations.

MUH 5065 Latino Music in the United States (3). Survey of Latin American musical traditions brought through immigration. Examination of musical style and social context in lecture-discussion format with film and performance demonstrations.

MUH 5066 Music of Mexico and Central America (3). A survey of folk, popular and classical musical traditions in the region. Examination of musical style and social context in lecture-discussion format with film and performance demonstrations.

MUH 5067 Music of the Caribbean (3). Survey of folk, popular and classical musical traditions and their ongoing connection with Caribbean populations in the U.S.. Class includes film and performance demonstrations.

MUH 5375 Twentieth Century Music: 'New Dimensions' (3). A technical study of music since 1900. Lectures on style plus demonstrations and practical application will be supplemented with recordings and analysis.

MUH 5815 Jazz History: The Innovators (3). The work of four artists whose innovations have profoundly defined the jazz idiom from its beginning through the present day-Duke Ellington, Charlie Parker, Miles Davis, and John Coltrane.

MUL 4400 Keyboard Literature (3). Study of solo works for the keyboard from historical beginnings to the present. Performance practices and stylistic analysis will be emphasized, with illustrations of representative works. Prerequisites: MUH 3211, MUH 3212.

MUL 4500 Symphonic Literature (3). Survey of symphonic literature from the 17th century to present day. Analysis and illustrations of representative works. Prerequisites: MUH 3211, and MUH 3212.

MUL 4630 Symphonic/Chamber Vocal Literature (1). Corequisites with MUL 4500 Symphonic Literature. A practicum surveys Symphonic & Chamber vocal music from 17th Century to present day. Includes selection of personal repertory and ensemble performance.

MUL 4662 History and Literature of Opera (3). Chronological survey of opera literature from the 17th century to present day. Analysis and performance of representative works. Prerequisites: MUH 3211, and MUH 3212.

MUL 5402 Keyboard Literature (3). Survey of keyboard literature from antiquity through the twentieth century. Emphasis on the evolving role of the keyboard in music history.

MUL 5456 Wind Instrument Literature (3). The history and development of Wind Instrument Literature from ca. 1650 to the present day. Music appropriate for all levels of instruction from middle school through college level is included. Prerequisite: Advanced/graduate standing.

MUL 5645 Choral Literature (3). A survey of sacred and secular choral literature from the Middle Ages to the present. Emphasis on stylistic analysis and performance practice for each style period. Includes score study, aural analysis of recorded performances and in-class performances. Prerequisite: Permission of the instructor.

MUM 1401 Music Calligraphy (3). The correct procedures for music penmanship, the notation of notes and chords for music parts and scores.

MUM 3601 Audio Techniques I (3). Basic sound engineering, including the basic workings of P.A. equipment and the interplay between the various components.

MUM 3602 Audio Techniques II (3). Studio recording techniques, microphone placement, taping and mixing.

MUM 4301 Business of Music (1). Principles and practices of modern publishing techniques; copyright laws; wholesale and retail distribution of music. Performance rights; agreements and relations between producers directors, performers, writers, personnel managers, and booking agents. Prerequisite: Permission of the instructor.

MUM 4302 Business of Music II (3). Continuation of principles and practices of modern publishing techniques; copyright laws; wholesale and retail distribution of music. Performance rights; agreements and relations between producer, directors, performers, writers, personnel managers, booking agents. Prerequisite: MUM 4301.

MUM 4940 Music Internship (VAR). Practical experience utilizing music theory, composition, and history in the commercial music industry. The precise nature of the work will be determined in consultation with an advisor. Prerequisite: MUM 4302.

MUM 5705 Advanced Business of Music (3). Topics include strategic planning, employee development, and

decision making. Also includes a study of publishing, collection agencies, creative unions, and contracts with composers and producers. Prerequisite: MUM 4301 and permission of graduate advisor.

MUM 5715 Performing Arts Production 1 (2). Focus on the various aspects of performing arts production. Students attend performances of every possible genre of performing arts and critique the production and the venue. Prerequisite: Permission of graduate advisor.

MUM 5725 Live Music Operations I (2). How promoters and producers project a profit margin and the ability to oversee a profit; considering overhead, scheduling, accommodations, concessions, sound and light. Prerequisite: Permission of the graduate advisor.

MUM 5726 Live Music Operations II (3). Continuation of MUM 5725, Live Music Operations I. Emphasis on promoters', producers', and managers' ability to project a profit margin. An on-campus production is required as the final project. Prerequisite: MUM 5725 and permission of the graduate advisor.

MUM 5795 Music Production Laboratory I (1). Students are assigned to work in the production of 10-15 individual concert productions. The productions are varied and provide the students the opportunity to put in practice work learned in the classroom. Prerequisite: Permission of the graduate advisor.

MUM 5796 Music Production Laboratory II (1). A continuation of Music Production Lab I. Students are assigned to work in the production of 10-15 individual concert productions. Prerequisite: MUM 5795 and permission of the graduate advisor.

MUM 5797 Music Production Laboratory III (1). A continuation of Music Production Lab II. Students are assigned to work in the production of 10-15 individual concert productions. Prerequsite: MUM 5796 and permission of the graduate advisor.

MUM 5946 Performance Arts Internship (9). Interns assist and/or observe in all job functions and duties at an entertainment venue. Areas include: production management; design services; technical production; talent booking and casting; and creative show development. Prerequisite: Permission of graduate advisor.

MUN 1100, 4103, 5105 Golden Panther Band (1). A study and performance of pop, jazz, and rock musical selections for the instrumental medium. Students will demonstrate what they have learned by performing and through individualized playing examinations. Prerequisite: Permission of the instructor.

MUN 1120, 3123, 5125 University Concert Band (1). Readings and performances of large concert band repertoire, including pop and show tunes. Designed to give any university student who demonstrates an acceptable level of performance on a wind or percussion instrument, the opportunity to perform in a band.

MUN 1140, 4143, 5145 Symphonic Wind Ensemble (1). Readings and performances of wind ensemble music from the 18th century to the present. Open to wind and percussion instrumentalists. Prerequisite: Permission of conductor.

MUN 1210, 4213, 5215 Orchestra (1). An instrumental ensemble performing works from the symphonic repertory. Prerequisites: Previous experience and permission of conductor.

MUN 1310, 3313, 5315 Concert Choir (1). A choral ensemble performing music written and arranged for mixed voices. Prerequisite: Permission of the instructor.

MUN 1340, 3343, 5345 Sunblazer Singers (1). A small ensemble of selected mixed voices performing a repertoire in the modern popular idiom. Miniature contemporary accompaniment will be utilized. Prerequisite: Permission of conductor.

MUN 1380, 3383, 4380, 5385 Master Chorale (1). A chorus performing a repertoire primarily from great choral works. Large orchestral accompaniment as well as various instrumental ensembles will be utilized. Prerequisite: Permission of conductor.

MUN 1430, 3433, 5435 University Brass Choir (1). A study and performance of literature written for the brass medium (trumpet, horn, trombone, euphonium, and tuba) from the pre-baroque, baroque, classical, romantic and contemporary periods. May be repeated. Prerequisite: Permission of the instructor.

MUN 1460, 3463, 5465 Chamber Music (1). Small ensemble in the performing of chamber music literature. Prerequisite: Permission of conductor.

MUN 1481, 2482, 3484, 4486 Jazz Guitar Ensemble (1). Ensemble consists of five or more electric guitars performing arrangements, accompanied by bass and drums. Emphasis placed on sight reading, styles, phrasing, dynamics, ensemble blend, swing, etc.

MUN 1710, 3713, 5715 Studio Jazz Ensemble (1). An ensemble to provide creative professional-level experience in the contemporary popular idiom. Permission of conductor.

MUN 1790 Salsa Jazz Ensemble (1). An ensemble to provide creative professional-level experience in the salsa/Latin jazz idiom. Prerequisite: Permission of the instructor.

MUN 2320, 4323, 5325 Women's Chorus (1). A choral ensemble performing music written or arranged for women's voices. Prerequisite: Permission of the instructor.

MUN 2330, 4333, 5335 Men's Chorus (1). A choral ensemble performing music written or arranged for men's voices. Prerequisite: Permission of the instructor.

MUN 2440, 4443, 5445 Percussion Ensemble (01). A study and performance of music literature characteristic of the percussion ensemble. Prerequisite: Permission of the instructor.

MUN 2450, 4453, 5455 Piano Ensemble (1). The presentation and performance of music literature characteristic of piano and pianos in ensemble.

MUN 2480, 4483, 5485 Guitar Ensemble (1). The presentation and performance of music literature characteristic of the Guitar Ensemble. Prerequisite: Permission of conductor.

MUN 2490, 4493, 5495 New Music Ensemble (1). A chamber group of varying instrumentation and size performing art music from the 20th century with emphasis on music from the past 20 years. Explores electronics, multimedia works, etc. Prerequisite: Permission of the instructor.

MUN 2491, 4494, 5496 Latin American Music Ensemble (1). Study and performance of one or more folk and/or popular musical styles from Latin America.

MUN 2510, 4513, 5515 Accompanying (1). Accompanying instrumental and vocal students in studio and recital situations.

MUN 2711, 4714, 5716 Jazz Combo Class (1). Harmonic practice, formal procedures, rhythmic and improvisational practices of jazz performance in the small group. Prerequisites: Permission of conductor.

MUN 4784, 5785 Jazz Ensemble Rehearsal Techniques (1). An ensemble that provides its members a creative approach to jazz ensemble rehearsal techniques, literature, improvisation and related materials. Prerequisite: Permission of the instructor.

MUO 1501, 4502, 5505 Opera Workshop (1). The presentation and performance of music literature indigenous to the opera stage. Prerequisite: Permission of director.

MUO 2001 Music Theater Workshop-Voice (2). Introduction to musical comedy performance; integration of dramatic, musical and movement components studied through work on selected scenes and songs. Particular emphasis on vocal training. Corequisites: TPP 3250.

MUO 3603 Elements of Stage Production (2). Aspects of technical theatre will be examined such as stage design and lighting, costumes and make-up, stage direction, prop construction, prompting, and Opera Theatre administration.

MUO 4503 Opera Theatre I (3). Culmination of opera courses with emphasis on accumulation of repertoire, systematic development of a role, and rehearsal procedures and discipline. Student may perform self-directed scenes. Permission of the instructor.

MUO 4504 Opera Theatre II (3). Continuation of Opera Theatre I. Student may participate in staged operatic production as performer or technical personnel. Prerequisite MVV 4561, MVV 4451, and MVV 3931 or permission of the instructor.

MUS 1010 MUS 3040 Recital Attendance (0). Students attend concerts and recitals as a corequisite to applied music. Required of music majors each semester.

MUS 2211 English Diction (1). Develop the skills in the proper enunciation of the English language as used in opera, oratorio and art song literature. Corequisites: All applied MVV.

MUS 2221 French Diction (1). Develop the skills in the proper enunciation of the French language as used by singers in opera, oratorio and art song literature. Corequisites: All applied MVV.

MUS 2231 German Diction (1). Develop the skills in the proper enunciation of the German language as used by singers in opera, oratorio and art song literature. Corequisites: All applied MVV.

MUS 2241 Italian Diction (1). Develop the skills in the proper enunciation of the Italian language as used by singers in opera, oratorio and art song literature. Corequisites: All applied MVV.

MUS 3905, MUS 5905 Directed Study (VAR). Designed to provide areas of exploration and specialization beyond the basic selected study programs, such as electronic music, religious music literature, sound techniques, etc. Prerequisite: Permission of the instructor.

MUS 3910, MUS 4910, MUS 5910 Research (VAR). Research composition or performance projects, under the guidance and direction of the music faculty. (May be repeated). Prerequisite: Permission of the instructor.

MUS 4949 Cooperative Education in Performing Arts (VAR). A student majoring in Performing Arts may spend several semesters fully employed in industry or government in a capacity relating to the major.

MUS 5345 MIDI Technology (2). Introduction to MIDI technology including sequencing, notation, patch editing and a variety of other applications. Prerequisite: Graduate standing.

MUS 5512 Sound Reinforcement (2). Exploration of live music on location, dealing with commonly encountered acoustical problems and how to overcome them. Prerequisite: Permission of the graduate advisor.

MUS 5655 Expanding Artisitc Expression (2). Focuses on expanding the horizons of the artistic vision of the student. Accomplished through a series of projects. Prerequisite: Permission of the graduate advisor.

MUS 5906 Thesis/Recital (1-6). For students working on a thesis or recital for MM in Music. To be completed under the supervision of a faculty member. Prerequisite: Graduate student.

MUS 5971 Thesis (1-6). Research and/or performances towards completion of master's thesis work. Prerequisite: Permission of graduate area advisor.

MUT 1001 Fundamentals of Music (3). A beginning music theory course in the basic elements of music rhythms, meter notation, key signatures scales, intervals, and triads.

MUT 1111 Music Theory I (3). This course is designed to promote and develop comprehensive musicianship in all disciplines of the musical art, analysis, composition, performance, and listening. Corequisites: MUT 1221.

MUT 1112 Music Theory II (3). This course is designed to promote and develop comprehensive musicianship in all disciplines of the musical art, analysis, composition, performance, and listening. The second semester is a continuation of Theory I. Prerequisite: MUT 1111, Corequisites: 1222.

MUT 1221 Sightsinging I (1). Development of Basic Musicianship through aural perception, sightsinging, and ear training exercises. Corequisites: MUT 1111.

MUT 1222 Sightsinging II (1). Development of Basic Musicianship through aural perception, sightsinging and ear training exercises. The second semester is a continuation of Sightsinging I. Prerequisite: MUT 1221. Corequisites: MUT 1112.

MUT 2116 Music Theory III (3). Continuation of Freshman Theory. It seeks to promote and further develop comprehensive musicianship in all disciplines of the musical art, analysis, composition, performance, and listening. Prerequisite: MUT 1112. Corequisites: MUT 2226.

MUT 2117 Music Theory IV (3). This course further develops those skills acquired in sophomore Theory I. Prerequisite: MUT 2116. Corequisites: MUT 2227.

MUT 2226 Sightsinging III (1). Continuation of the Development of Basic Musicianship through aural perception, sightsinging, and ear

training exercises. Prerequisite: MUT 1222. Corequisites: MUT 2116.

MUT 2227 Sightsinging IV (1). Continuation of the Development of Basic Musicianship through aural perception, sightsinging, and ear training exercises. Prerequisites: MUT 2226, MUT 2116. Corequisites: MUT 2117.

MUT 2641 Jazz Improvisation I (2). A beginning course in Jazz improvisation that teaches fundamental aspects, chord structures and extensions, chord scales, melodic patterns, and tunes. Course will involve both theory and practical application. A concert will be held at conclusion of the term. Prerequisite: Permission of the instructor.

MUT 2642 Jazz Improvisation II (2). A follow-up course that both reinforces and extends all materials learned in Jazz Improvisation I. Course stresses more complex chord structures, scales, and tunes. A concert will be held at conclusion of the term. Prerequisite: MUT 2641.

MUT 3401 Counterpoint (3). A study of linear writing through species counterpoint. Two and three-part instrumental and vocal counterpoint of the 18th century: Canon, inventions, fugues. Particular emphasis will be placed on formal analysis. Prerequisite: MUT 2117, 2227, or equivalent.

MUT 3611 Form and Analysis (3). Study and analysis from the smaller forms of musical composition to multimovement forms. Prerequisite: MUT 2117, MUT 2227.

MUT 4311 Orchestration (2-3). With a background of basic theory, the student will explore the techniques of writing and arranging for instruments in performing organizations. Prerequisite: Prerequisites: MUT 2117 and MUT 2227.

MUT 4353 Jazz Arranging (2). This course teaches the fundamental aspects of jazz arranging: instrumentation, transposition, section and ensemble writing, chord voicing, counterpoint, and form and analysis. The performance of an original arrangement is required as a final project. Prerequisite: MUT 2641.

MUT 4643 Jazz Improvisation III (2). A continuation of Jazz Improvisation II, this course teaches chromatic chords, advanced scales and progressions, patterns, repertoire. Individual and ensemble performance is required as a final project. Prerequisite: MUT 2642.

MUT 4644 Jazz Improvisation IV (2). A continuation of the Jazz Improv I, II, and III track. Further study and analysis of contemporary jazz compositions and their harmonic implications as applied to the craft improvisation. Prerequisite: Jazz Improvisation I, II, and III.

MUT 4663 Jazz Styles and Analysis I (2). An extensive study of the significant styles and performers in jazz history from its origins to the present. Includes instruction in layered listening, various analyses and transcribing. Prerequisites: Jazz theory or permission of the instructor.

MUT 4664 Jazz Styles and Analysis II (2). An extensive study of the significant styles and performers in jazz history from its origins to the present. Includes instruction in layered listening, various analyses and transcribing. Continuation of Jazz Styles and Analysis I. Prerequisites: MUT 4663 or permission of the instructor.

MUT 5051 Graduate Theory Survey (0). Analytical, theoretical and aural skills required for successful graduate studies in music. Prerequisite: Graduate standing in the School of Music or permission of the instructor.

MUT 5152 Comprehensive Musical Systems (3). Examination of various comprehensive theoretical systems utilized in the analysis of music. Prerequisite: Graduate standing in the School of Music or permission of the instructor.

MUT 5316 Advanced Orchestration (3). Examination of orchestrational techniques utilized by composers from the Baroque era through current times. Prerequisite: Graduate standing in the School of Music or permission of the instructor.

MUT 5355 Advanced Jazz Arranging and Composition (3). Scores and recordings of various sized jazz ensembles are studied for technique and style. Student's compositions and arrangements are performed. Topics include: forms, voicing techniques, instrumentation-live performance vs. recording session. Prerequisite: MUT 4353; MUT 4663; MUT 4664.

MUT 5381 Arranging (3). A course in practical arranging for the public school teacher, including choral, band, and popular arranging. Prerequisites: MUT 2117 and MUT 2227.

MUT 5411 Modal Counterpoint (3). Develop skills necessary to write in the Renaissance style and to analyze the masterworks of Palestrina, Lassus, Victoria, and others. Prerequisite: Graduate standing in the School of Music or permission of the instructor.

MUT 5486 Advanced Jazz Rehearsal Techniques (2). Study and practical application of complete preparation, programming, and rehearsing of small and large jazz ensembles. Students study scores and recordings of various jazz styles and rehearse school's ensembles. Prerequisite: MUN 4784; MUT 4643; MUT 4663; MUT 4664.

MUT 5585 Musical Styles Through Strict Composition (3). This course is designed to develop basic compositional skills for writing works in all forms and fugues. Prerequisite: Graduate standing in the School of Music or permission of the instructor.

MUT 5627 Schenkerian Analysis (3). Advanced studies in Schenkerian analysis of tonal music. Prerequisite: Graduate standing in the School of Music or permission of the instructor.

MUT 5628 Atonal Analysis (3). Advanced studies in set theory and serial techniques of twentieth-century music. Prerequisite: Graduate standing in the School of Music or permission of the instructor.

MUT 5629 Analytical Techniques (3). Examination and practice of various techniques utilized in the analysis of art music from the common practice period through the 20th century. Prerequisite: Placement exam or permission of the instructor.

MUT 5930 Special Topics (3). Examination of composers, compositional schools, or other areas of specialization and/or interest to the theory/composition faculty. Prerequisite: Graduate standing in the School of Music or permission of the instructor.

MUT 5646 Advanced Jazz Techniques I (2). A comprehensive, theoretical study of topics related to jazz performance. Includes the nature of improvisation, advanced jazz harmony, theory of jazz improvisation, transcribing and analyzing solos of jazz masters. Prerequisite: MUT 4643.

MUT 5647 Advanced Jazz Techniques II (2). A continuing study of topics related to jazz performance. Includes analyzing solos of jazz masters, development of repertoire, style, and aesthetic concepts. Prerequisite: Advanced Jazz Techniques I.

MUT 5746 Jazz Pedagogy (2). Materials, techniques, and philosophies related to teaching jazz. Includes preparation of courses, course outline and syllabi, lesson plans, lectures. Texts and other resources such as videos, recordings, periodicals, are examined. Prerequisite: MUT 4663 and MUT 5355.

MVB 1211, 2221, 3231, 4241, 5251 Secondary Applied Trumpet (1). Individual instruction in applied music on trumpet as a secondary instrument. Prerequisite: Permission of the instructor.

MVB 1212, 2222, 3232, 4242, 5252 Secondary Applied French Horn (1). Individual instruction in applied music on french horn as a secondary instrument. Prerequisite: Permission of the instructor.

MVB 1213, 2223, 3233, 4243, 5253 Secondary Applied Trombone (1). Individual instruction in applied music on trombone as a secondary instrument. Prerequisite: Permission of the instructor.

MVB 1214, 2224, 3234, 4244, 5254 Secondary Applied Baritone Horn (1). Individual instruction in applied music on baritone horn as a secondary instrument. Prerequisite: Permission of the instructor.

MVB 1215, 2225, 3235, 4245, 5255 Secondary Applied Tuba (1). Individual instruction in applied music on tuba as a secondary instrument. Prerequisite: Permission of the instructor.

MVB 1311, 2321, 3331, 4341, 5351 Principal Applied Trumpet (1-2). Individual instruction in applied music on trumpet as a principal instrument. Music majors only.

MVB 1312, 2322, 3332, 4342, 5352 Principal Applied French Horn (1-2). Individual instruction in applied music on french horn as a principal instrument. Music majors only.

MVB 1313, 2323, 3333, 4343, 5353 Principal Applied Trombone (1-2). Individual instruction in applied music on applied trombone as a principal instrument. Music majors only.

MVB 1314, 2324, 3334, 4344, 5354 Principal Applied Baritone Horn (1-2). Individual instruction in applied music on baritone horn as a principal instrument. Music majors only.

MVB 1315, 2325, 3335, 4345, 5355 Applied Tuba (1-2). Individual instruction in applied music on tuba as a principal instrument. Music majors only.

MVB 1411, 2421, 3431, 4441, 5451 Major Applied Trumpet (1-2). Individual instruction in applied music on trumpet as a major instrument. Music majors only.

MVB 1412, 2422, 3432, 4442, 5452 Major Applied French Horn (1-2). Individual instruction in applied music on french horn as a major instrument. Music majors only.

MVB 1413, 2423, 3433, 4443, 5453 Major Applied Trombone (1-2). Individual instruction in applied music on trombone as a major instrument. Music majors only.

MVB 1414, 2424, 3434, 4444, 5454 Major Applied Baritone Horn (1-2). Individual instruction in applied music on baritone horn as a major instrument. Music majors only.

MVB 1415, 2425, 3435, 4445, 5455 Major Applied Tuba (1-2). Individual instruction in applied music on tuba as a major instrument. Music majors only.

MVB 3970 Junior Recital - Brass (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVB 4971 Senior Recital - Brass (1). All music majors must present, before graduation, at least one half (full recital performance for majors) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVJ 1210, 2220, 3230, 4240, 5250 Secondary Jazz Piano (1). Individual instruction in applied jazz music on piano. Prerequisite: Preceding course in sequence or permission of the instructor.

MVJ 1211 Principal Applied Jazz Drums (1-2). Individual instruction in applied music on jazz drums as a principal instrument. Prerequisite: Music majors only.

MVJ 1212 Secondary Latin Jazz Percussion (1). Individual instruction in applied music on Latin percussion instruments. Prerequisite: Permission of the instructor.

MVJ 1213, 2223, 3233, 4243, 5253 Secondary Jazz Guitar (1). Individual instruction in applied jazz music on guitar. Prerequisite: Preceding course in sequence or permission of the instructor.

MVJ 1214, 2224, 3234, 4244, 5254 Secondary Jazz Electric Bass (1). Individual instruction in applied jazz music on electronic bass. Prerequisite: Preceding course in sequence or permission of the instructor.

MVJ 1215, 2225, 3235, 4245, 5255 Secondary Jazz Flute (1). Individual instruction in applied jazz music on flute. Prerequisite: Preceding course in sequence or permission of the instructor.

MVJ 1216, 2226, 3236, 4246, 5256 Secondary Jazz Saxophone (1). Individual instruction in applied jazz music on saxophone. Prerequisite: Preceding course in sequence or permission of the instructor.

MVJ 1217, 2227, 3237, 4247, 5257 Secondary Jazz Trumpet (1). Individual instruction in applied jazz music on trumpet. Prerequisite: Preceding course in sequence or permission of the instructor.

MVJ 1218, 2228, 3238, 4248, 5258 Secondary Jazz Trombone (1). Individual instruction in applied jazz music on trombone. Prerequisite: Preceding course in sequence or permission of the instructor.

MVJ 1219, 2229, 3239, 4249, 5259 Secondary Jazz Percussion (1). Individual instruction in applied jazz music on percussion. Prerequisite: Preceding course in sequence or permission of the instructor.

MVJ 1310 Principal Applied Jazz Piano (1-2). Individual instruction in applied music on jazz piano as a principal level. Prerequisite: Music majors only.

MVJ 1312 Principal Applied Latin Jazz Percussion (1-2). Individual instruction in applied music on Latin jazz percussion as a principal instrument. Prerequisite: Music majors only.

MVJ 1313, 2323, 3333, 4343, 5353 Principal Jazz Guitar (2). Individual instruction in applied jazz music on guitar. Prerequisite: Preceding course

in sequence or permission of the instructor.

MVJ 1314, 2324, 3334, 4344, 5354 Principal Jazz Electric Bass (2). Individual instruction in applied jazz music on electronic bass. Prerequisite: Preceding course in sequence or permission of the instructor.

MVJ 1410, 2420 Major Applied Jazz Piano (2). Individual instruction in applied music on jazz piano as a major level. Prerequisite: Music majors only.

MVJ 1411 Major Applied Jazz Drums (1-2). Individual instruction in applied music on jazz drums as a major instrument. Prerequisite: Music majors only.

MVJ 1412, 2472, 3473, 4474, 5475 Major Applied Latin Jazz Percussion (2). Individual instruction in applied music on Latin jazz percussion as a major instrument. Prerequisite: Music majors only.

MVJ 1413 Major Applied Jazz Guitar (1-2). Individual instruction in applied music on jazz guitar at a major level. Prerequisite: Music majors only.

MVJ 1414, 2424, 4444, 5454 Major Applied Jazz Bass (1-2). Individual instruction in applied music on jazz bass at a major level. Prerequisite: Music majors only.

MVJ 2429, 3439, 4449, 5459 Major Jazz Percussion (2) Individual instruction in applied music on jazz percussion as a major instrument. Prerequisite: Music Majors Only

MVJ 3970 Junior Recital – Jazz (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination. See areas of emphasis for specific requirements. Prerequisite: Approval of director of Jazz Studies.

MVJ 4971 Senior Recital - Jazz (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVJ 5150 Jazz Piano Techniques (1). Performance of basic jazz standards. Includes basic techniques of the instrument, chord voicing, comping, lead sheet realization for non-pianists. Prerequisite: Graduate standing or permission of the instructor. Prerequisite: Graduate standing or permission of the instructor.

MVJ 5350 Principle Applied Jazz: Keyboard (2) Individual advanced instruction on major instrument. An in-depth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.

MVJ 5355 Principle Applied Jazz: Flute (2). Individual advanced instruction on major instrument. An in-depth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.

MVJ 5356 Principle Applied Jazz: Saxophone (2). Individual advanced instruction on major instrument. An in-depth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.

MVJ 5357 Principle Applied Jazz: Trumpet (2). Individual advanced instruction on major instrument. An in-depth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.

MVJ 5358 Principle Applied Jazz: Trombone (2). Individual advanced instruction on major instrument. An in-depth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.

MVJ 5359 Principle Applied Jazz: Percussion (2). Individual advanced instruction on major instrument. An in-depth study of overall instrumental technique, eminent jazz styles, and other performance practices that are particularly relevant to jazz.

MVJ 5453 Major Applied Jazz Guitar (2) Individual instruction on major instrument, focusing on the jazz idiom. An in-depth study of overall instrumental technique, eminent styles, and other performance practices that are particularly relevant to jazz and commercial performance. Prerequisite: Music Majors Only

MVJ 5454 Major Applied Jazz Electric Bass (2). Individual instruction on major instrument, focusing on the jazz idiom. An in-depth study of overall instrumental technique, eminent styles, and other performance practices that are particularly relevant to jazz and commercial performance. Prerequisite: Music Majors Only

MVK - Keyboard Studies (1). Course designed to develop the composite keyboard skills and practical training for the piano major/principle to become a proficient sight-reader.

MVK 1111 Class Piano I (1). A course designed to teach piano skills and competencies to non-piano majors. This is a four-semester sequence for music majors. This course includes: keyboard familiarization, finger exercises and techniques, transposing, and easy literature. Prerequisite: None.

MVK 1112 Class Piano II (1). A continuation of Class Piano I, MVK 1111. Prerequisite: MVK 1111.

MVK 1211, 2221, 3231, 4241, 5251 Secondary Applied Piano (1). Individual instruction in applied music on piano as a secondary instrument. Prerequisite: Permission of the instructor.

MVK 1213, 2223, 3233, 4243, 5253 Secondary Applied Organ (1). Individual instruction in applied music on organ as a secondary instrument. Prerequisite: Permission of the instructor.

MVK 1311, 2321, 3331, 4341, 5351 Principal Applied Piano (1-2). Individual instruction in applied music on piano as a principal instrument. Music majors only.

MVK 1313, 2323, 3333, 4343, 5353 Principal Applied Organ (1-2). Individual instruction in applied music on organ as a principal instrument. Music majors only.

MVK 1411, 2421, 3431, 4441, 5451 Major Applied Piano (1-2). Individual instruction in applied music on piano as a major instrument. Music majors only.

MVK 1413, 2423, 3433, 4443, 5453 Major Applied Organ (1-2). Individual instruction in applied music on organ as a major instrument. Music majors only.

MVK 2121 Class Piano III (1). A continuation of Class Piano II. The course includes continued work in finger technique, scales and fingering, transposing, simple accompaniments to folk songs, sight reading cadences, and simple literature. Prerequisite: MVK 1112.

MVK 2122 Class Piano IV (1). A continuation of Class Piano III. Prerequisite: MVK 2121.

MVK 3130 Class Piano V (1). Further development of elementary keyboard techniques and musicianship: scales, harmonization, arpeggios, transposition, improvisation, sightreading, and simple literature. Prerequisite: MVK 2122 or by placement exam.

MVK 3131 Class Piano VI (1). A continuation of MVK 3130. Prerequisite: MVK 3130 or by placement exam.

MVK 3970 Junior Recital - Keyboard (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVK 4141 Class Piano VII (1). Further development of elementary keyboard techniques and musicianship: scales, harmonization, arpeggios, transposition, improvisation, sightreading, and simple literature. Prerequisite: MVK 3131 or by placement exam.

MVK 4142 Class Piano VIII (1). A continuation of MVK 4141. Prerequisite: MVK 4141 or by placement exam.

MVK 4640 Piano Pedagogy (2). A survey of current teaching methods and techniques in piano pedagogy. Supervised teaching provides hands-on experience.

MVK 4971 Senior Recital - Keyboard (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVP 1211, 2221, 3231, 4241, 5251 Secondary Applied Percussion (1). Individual instruction in applied music on percussion as a secondary instrument. Prerequisite: Permission of the instructor.

MVP 1311, 2321, 3331, 4341, 5351 Principal Applied Percussion (1-2). Individual instruction in applied music on percussion as a principal instrument. Music majors only.

MVP 1411, 2421, 3431, 4441, 5451 Major Applied Percussion (1-2). Individual instruction in applied music on percussion as a major instrument. Music majors only.

MVP 3970 Junior Recital - Percussion (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVP 4971 Senior Recital - Percussion (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVS 1116 Guitar Skills (1). Emphasis on music reading and elementary techniques. Prerequisite: Permission of the instructor.

MVS 1211, 2221, 3231, 4241, 5251 Secondary Applied Violin (1). Individual instruction in applied music on violin as a secondary instrument. Prerequisite: Permission of the instructor.

MVS 1212, 2222, 3232, 4242, 5252 Secondary Applied Viola (1). Individual instruction in applied music on viola as a secondary instrument. Prerequisite: Permission of the instructor.

MVS 1213, 2223, 3233, 4243, 5253 Secondary Applied Cello (1). Individual instruction in applied music on cello as a secondary instrument. Prerequisite: Permission of the instructor.

MVS 1214, 2224, 3234, 4244, 5254 Secondary Applied Double Bass (1). Individual instruction in applied music on double bass as a secondary instrument. Prerequisite: Permission of the instructor.

MVS 1215, 2225, 3235, 4245, 5255 Secondary Applied Harp (1). Individual instruction in applied music on harp as a secondary instrument. Prerequisite: Permission of the instructor.

MVS 1216, 2226, 3236, 4246, 5256 Secondary Applied Guitar (1). Individual instruction in applied music on guitar as a secondary instrument. Prerequisite: Permission of the instructor.

MVS 1311, 2321, 3331, 4341, 5351 Principal Applied Violin (1-2). Individual instruction in applied music on violin as a principal instrument. Music majors only.

MVS 1312, 2322, 3332, 4342, 5352 Principal Applied Viola (1-2). Individual instruction in applied music on viola as a principal instrument. Music majors only.

MVS 1313, 2323, 3333, 4343, 5353 Principal Applied Cello (1-2). Individual instruction in applied music on cello as a principal instrument. Music majors only.

MVS 1314, 2324, 3334, 4344, 5354 Principal Applied Double Bass (1-2). Individual instruction in applied music on double brass as a principal instrument. Music majors only.

MVS 1315, 2325, 3335, 4345, 5355 Principal Applied Harp (1-2). Individual instruction in applied music on harp as a principal instrument. Music majors only.

MVS 1316, 2326, 3336, 4346, 5356 Principal Applied Guitar (1-2). Individual instruction in applied music on guitar as a principal instrument. Music majors only.

MVS 1411, 2421, 3431, 4441, 5451 Major Applied Violin (1-2). Individual instruction in applied music on violin as a major instrument. Music majors only.

MVS 1412, 2422, 3432, 4442, 5452 Major Applied Viola (1-2). Individual instruction in applied music on viola as a major instrument. Music majors only.

MVS 1413, 2423, 3433, 4443, 5453 Major Applied Cello (1-2). Individual instruction in applied music on cello as a major instrument. Music majors only.

MVS 1414, 2424, 3434, 4444, 5454 Major Applied Double Bass (1-2). Individual instruction in applied music on double brass as a major instrument. Music majors only.

MVS 1415, 2425, 3435, 4445, 5455 Major Applied Harp (1-2). Individual instruction in applied music on harp as a major instrument. Music majors only.

MVS 1416, 2426, 3436, 4446, 5456 Major Applied Guitar (1-2). Individual instruction in applied music on guitar as a major instrument. Music majors only.

MVS 2226 Intermediate Guitar Skills (1). Emphasis on techniques and styles such as calypso, folk, blues, classical, and jazz. Open to all FIU students. Prerequisite: MVS 1116.

MVS 3970 Junior Recital - String (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVS 4971 Senior Recital - String (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVV 1111 Voice Class (1). Class instruction on voice designed to help the student in developing performance skills and increased musical know ledge. Prerequisite: Permission of the instructor.

MVV 1211, 2221, 3231, 4241, 5251 Secondary Voice (1). Individual instruction in applied music on voice as a secondary instrument. Prerequisite: Permission of the instructor.

MVV 1311, 2321, 3331, 4341, 5351 Principal Applied Voice (1-2). Individual instruction in applied music on trumpet as a principal instrument. Music majors only.

MVV 1411, 2421, 3431, 4441, 5451 Major Applied Voice (1-2). Individual instruction in applied music on voice as a major instrument. Music majors only.

MVV 2121 Intermediate Voice Class (1). Emphasis on sightsinging, tonal production, interpretation, and other vocal exercises. Particular attention is paid to vocal and acting improvisation. Prerequisite: MVV 1111.

MVV 3630 Vocal Pedagogy (1). Research into various philosophies of vocal pedagogy with emphasis on the science of acoustics, anatomy, terminology, psychological factors which apply to the art of singing.

MVV 3970 Junior Recital - Voice (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVV 4551 Opera History Practicum (2). A performance course corequisite with History of Opera: MUL 4662 with emphasis on historical development and differentiation of operatic styles through characterization and musical interpretation. Includes ensemble experience.

MVV 4971 Senior Recital - Voice (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVV 5651 Vocal Pedagogy (3). A survey of the literature of teaching methods for the mature voice derived from historical and modern sources. Prerequisite: Permission of the instructor. Corequisites: Applied voice lesson.

MVW 1211, 2221, 3231, 4241, 5251 Secondary Applied Flute (1). Individual instruction in applied music on flute as a secondary instrument. Prerequisite: Permission of the instructor.

MVW 1212, 2222, 3232, 4242, 5252 Secondary Applied Oboe (1). Individual instruction in applied music on oboe as a secondary instrument. Prerequisite: Permission of the instructor.

MVW 1213, 2223, 3233, 4243, 5253 Secondary Applied Clarinet (1). Individual instruction in applied music on clarinet as a secondary instrument. Prerequisite: Permission of the instructor.

MVW 1214, 2224, 3234, 4244, 5254 Secondary Applied Bassoon (1). Individual instruction in applied music on bassoon as a secondary instrument. Prerequisite: Permission of the instructor.

MVW 1215, 2225, 3235, 4245, 5255 Secondary Applied Saxophone (1). Individual instruction in applied music on saxophone as a secondary instrument. Prerequisite: Permission of the instructor.

MVW 1311, 2321, 3331, 4341, 5351 Principal Applied Flute (1-2). Individual instruction in applied music on flute as a principal instrument. Music majors only.

MVW 1312, 2322, 3332, 4342, 5352 Principal Applied Oboe (1-2). Individual instruction in applied music on oboe as a principal instrument. Music majors only.

MVW 1313, 2323, 3333, 4343, 5353 Principal Applied Clarinet (1-2). Individual instruction in applied music on clarinet as a principal instrument. Music majors only.

MVW 1314, 2324, 3334, 4344, 5354 Principal Applied Bassoon (1-2). Individual instruction in applied music on bassoon as a principal instrument. Music majors only.

MVW 1315, 2325, 3335, 4345, 5355 Principal Applied Saxophone (1-2). Individual instruction in applied music on saxophone as a principal instrument. Music majors only.

MVW 1411, 2421, 3431, 4441, 5451 Major Applied Flute (1-2). Individual instruction in applied music on flute as a major instrument. Music majors only.

MVW 1412, 2422, 3432, 4442, 5452 Major Applied Oboe (1-2). Individual instruction in applied music on oboe as a major instrument. Music majors only.

MVW 1413, 2423, 3433, 4443, 5453 Major Applied Clarinet (1-2). Individual instruction in applied music on clarinet as a major instrument. Music majors only.

MVW 1414, 2424, 3434, 4444, 5454 Major Applied Bassoon (1-2). Individual instruction in applied music on bassoon as a major instrument. Music majors only.

MVW 1415, 2425, 3435, 4445, 5455 Major Applied Saxophone (1-2). Individual instruction in applied music on saxophone as a major instrument. Music majors only.

MVW 3970 Junior Recital - Woodwind (1). All music performance majors must present, during their junior year, at least one half of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

MVW 4971 Senior Recital - Woodwind (1). All music majors must present, before graduation, at least one half (full recital performance major) of a public recital, and pass an oral examination on the music programmed. See areas of emphasis for specific requirements.

Philosophy

Paul Warren, *Associate Professor and Chairperson*
Michelle Beer, *Associate Professor*
Bongkil Chung, *Associate Professor*
Paul Draper, *Associate Professor*
Bruce Hauptli, *Professor*
Kenneth Henley, *Professor*
George Kovacs, *Professor*
Kenneth Rogerson, *Professor*

Bachelor of Arts in Philosophy

Degree Program Hours: 120

Common Prerequisites

No specific courses required; all students are encouraged to complete the Associate in Arts degree.

Philosophy encompasses a broad range of topics and methods of inquiry: Socratic questioning of the extent and nature of human knowledge, probing the rational basis of moral and political thought, confrontation with fundamental questions of value and meaning, analysis of basic concepts underlying theoretical and practical thought, reflection on the human existential situation, and exploring the structure of reasoning itself. The great philosophers are studied both for historical understanding and contemporary significance.

Philosophy majors may choose one of three tracks. The General Track is designed to serve students with a broad interest in philosophy. The Professional Track is designed for students considering philosophy as a professional discipline. It is especially appropriate for those considering graduate work in philosophy and those with an interest in a thorough and systematic study of the full range of philosophical thought. The Specialized Track is designed for students who are interested in philosophical reflection on a specific discipline or area such as law, religion, or psychology. It is especially appropriate for pre-law students and for dual majors who are interested in the relationship between philosophy and their other major discipline.

Degree Requirements

The following requirements apply to all three tracks. (i) any course taken to fulfill a requirement for the major may not be taken with the "pass/fail" option and must be passed with a grade of "C" or better, (ii) no more than 6 (six) hours of Independent Study may be used to fulfill major requirements, (iii) at most, one of PHI 2100 (Introduction to Logic) or PHI 2103 (Critical Thinking), or their equivalents, may be used to fulfill major requirements, and at most six other hours of lower division philosophy courses may be counted toward the degree, (iv) PHI 2011 (Philosophical Analysis) and introduction to philosophy courses taken at other institutions may not be used to fulfill major requirements, and (v) in addition to fulfilling the requirements of the major, the College of Arts and Sciences has a number of requirements which are listed in the University's Catalog at the beginning of the Arts and Sciences section. The Philosophy Department allows a maximum of 15 hours of philosophy transfer credit for a major (3 hours for a minor) subject to the following restrictions: at most one of PHI 2100 (Intorduction to Logic) or PHI 2103 (Critical Thinking), or their equivalents may be used to fulfill major requirements, and be counted toward the degree, moreover, PHI 2011 (Philosophical Analysis) and introduction to philosophy courses taken at other institutions may not be used to fulfill major requirements. Such transfer credit can only be awarded by a philosophy advisor and students who wish to apply for it are advised to discuss their course of studies with an advisor early in their career at FIU.

The General Track: (33 Semester Hours Required)

The General Track is designed to serve students with a broad interest in philosophy. One three-hour Logic course is required, selected from PHI 2100 (which counts within this track as part of the 33 hour total), PHI 4130, or PHI 4161. The remaining 30 hours may include any philosophy courses except PHI 2103 and PHI 3636. Students are strongly encouraged to discuss their course selections with their advisor.

The Professional Track: (33 Semester Hours Required)

The Professional Track is designed for students considering philosophy as a professional discipline. It is especially appropriate for those considering graduate work in philosophy and those with an interest in a thorough and systematic study of the full range of philosophical thought. While a foreign language is not required for the major, students considering graduate school should seriously consider sufficient course work in German, French, Latin, or Greek so that they achieve fluency in the language. Receiving a 'C' or better in 33 semester hours of upper division philosophy courses distributed as follows will fulfill the requirements for this track:

Logic/Probability[1]	3
Epistemology/Metaphysics	6
Value Theory	6
History of Philosophy[2]	9
Non-Western Philosophy	3
Other Philosophy Courses	3
Philosophy Seminar	3

(see department for list of courses which satisfy these requirements)

[1]PHI 2100 does not fulfill the Logic/Probability requirement for this track, however it may be included as a Philosophy elective.

[2]must include 3 hours in the area of Ancient Philosophy

PHI 2100 does not fulfill the

The Specialized Track: (33 Semester Hours Required)

The Specialized Track is designed for students who are interested in philosophical reflection on a specific discipline or area such as law, religion, or psychology. It is especially appropriate for pre-law students and for dual majors who are interested in the relationship between philosophy and their other major discipline. An approved Individualized Plan of Study will meet the requirements for this track. Such plans are designed by the Philosophy advisor in consultation with the student so that they can be tailored to the student's specific interests and goals. Students pursuing the Specialized Track must secure prior written approval of their course selections from their advisor. The proposed course selections must present a clear, focused, and coherent plan of study. The Philosophy Program Brochure (available in the Department on either campus) includes several models of such plans of study, including Pre-Law Studies, Western Philosophy and Its Historical Context, Social and Political Philosophy, Philosophy and Religious Thought, Philosophy and Difference, Philosophy and Psychology, and Philosophy and the Arts. Each such plan must include 33 semester hours, and the courses taken in accord with the plan must be passed with a grade of 'C' or better. One three-hour Logic course is required, selected from PHI 2100 (which counts within this track as part of the 33 hour total), PHI 4130, or PHI

4161. With the prior written approval of the Philosophy advisor, up to nine semester hours from other programs may be counted toward the 33 hour major (only six hours credited toward the major requirements of another major program may be counted toward the 33 hour philosophy major).

The Philosophy Minor

A student majoring in another academic discipline can earn an academic minor in Philosophy by taking 15 hours in philosophy (PHH, PHI, PHM, and PHP prefixes) and earning a "C" or better. Only three hours may be earned in lower division (1000 and 2000 level) courses.

Course Descriptions

Definition of Prefixes

GRE-Ancient Greek; PHH-Philosophy, History of; PHI-Philosophy; PHM-Philosophy of Man and Society; PHP-Philosophers and Schools.

GRE 3050 Introduction to Ancient Greek (3). Introduces the Greek language of the New Testament, and other works of the ancient period to enhance the understanding of translated texts. A portion of the Gospel of John is studied.

PHH 3042 Latin American Philosophy (3). This course will examine the development of Latin American thought, with particular attention to the 19th and 20th centuries. It will consider the traditions and initiatives of prominent Latin American philosophers in the light of problems such as personal and cultural identity.

PHH 3100 Ancient Philosophy (3). The basic concerns and teachings of representative philosophers and schools of thought, particularly in the Greek and Roman cultural settings, and linkages to their past and future are emphasized in this course.

PHH 3200 Medieval Philosophy (3). The basic concerns and teachings of representative philosophers and schools of thought in the cultural settings of the Middle Ages, and linkages to their past and future are emphasized in this course.

PHH 3401 Sixteenth and Seventeenth Century Philosophy (3). The basic concerns and teachings of representative European Continental philosophers of the 16th and 17th centuries (esp. Descartes, Pascal, Leibniz, and Spinoza) are emphasized in this course.

PHH 3402 British Empiricism (3). The basic concerns and teachings of representative British Empiricists of the 17th & 18th centuries (esp. Locke, Berkeley, and Hume) are emphasized in this course.

PHH 3420 Early Modern Philosophy (3). The basic concerns and teachings of representative philosophers and schools of thought in the period from the Renaissance to Kant and the linkages to their past and future are emphasized in this course.

PHH 3440 Late Modern Philosophy (3). The basic concerns and teachings of representative philosophers and schools of thought in the period from Kant to Nietzsche and the linkages to their past and future are emphasized in this course.

PHH 3602 Twentieth Century British Philosophy (3). Examines the development of 20th century British philosophy, with special attention to the justification for its aims, methods, and central concerns (e.g. knowledge, appearance and reality, memory, and the value of philosophy).

PHH 3700 American Philosophy (3). This course will examine the development of American philosophical thought, with particular attention to the 19th and 20th centuries. It will consider the traditions and initiatives of the prominent American philosophers, in the light of problems such as the relationship between theory and practice.

PHH 3810 Philosophy of Buddhism (3). Examines the central philosophy of Buddhism dealing with: 1) the question of reality and appearance, 2) the theories of causation, 3) the relation of these views to Buddhist soteriology (realism, idealism, dialectics, Hwa-yen).

PHH 3840 Indian Philosophy (3). Metaphysical, epistemological and ethical theories within such major Indian philosophical systems as philosophical Buddhism, Gains, Samkhya dualism, and Vedanta transcendentalism are examined.

PHH 4600 Twentieth Century Philosophy (3). The basic concerns and teachings of representative philosophers and schools of thought in the cultural settings of the present century, and linkages to past and emerging generations are emphasized in this course.

PHH 4930 A Major Philosopher (3). This course will examine in detail the works of a major figure in the history of philosophy. Prerequisite: Permission of the instructor. Course may be repeated on a different philosopher. (S)

PHI 2011 Philosophical Analysis (3). This course introduces both the tools of philosophical thinking and some of their applications to fundamental topics such as knowledge, value, meaning, and human society.

PHI 2100 Introduction to Logic (3). This introductory course in logical thinking and argumentation will treat both practical and theoretical approaches to understanding human communications and solving problems. Students will be introduced to inductive and deductive logic, fallacies, and the role of logic in scientific explanation and popular expression.

PHI 2101 Philosophical Logic (3). This course studies the propositional and predicate calculus and such topics as necessary truth, entailment, the ontological implications of logic, and the justification of deduction and induction.

PHI 2103 Critical Thinking (3). A course in practical reasoning designed to sharpen abilities at analyzing, evaluating, and constructing arguments.

PHI 2600 Introduction to Ethics (3). Explores philosophical accounts of morality, including the rational justification of commitment to the moral life, and theories of duty, obligation, and virtue.

PHI 3073 African Philosophy (3). An analysis of the metaphysical, epistemic, ethical, and political thoughts constituting the African world views and cultural settings.

PHI 3300 Epistemology (3). The viewpoints of various philosophers and schools of thought regarding types of knowledge, certitude, and creativity are the main emphases of this introductory course. The meaning of truth and truthfulness is analyzed from both the classical and the contemporary perspectives.

PHI 3320 Philosophy of Mind (3). An inquiry into the concept of mind and subsidiary concepts such as sensation, perception, desire, emotion, intention, volition, imagination, and intellect. The course will address the problem of the relation of mind and body and such topics as the concept of a person, the

nature of intentional action, and the nature of consciousness.

PHI 3400 Philosophy of Science (3). The philosophic background of scientific method will be examined. Attention will be given to the philosophical consequences of conceptual change in the sciences. Such topics as the growth and unity of science, explanation and prediction, and the role of science in society will be explored.

PHI 3420 Philosophy of Social Science (3). An inquiry into philosophical questions raised by the social sciences. Topics include forms of social explanation, the nature of rationality, and the status of values in social science.

PHI 3500 Metaphysics (3). This introductory course examines basic metaphysical questions regarding the nature of reality, as well as the meaning of these questions for the relationship of persons with their world. Fundamental texts from classical and contemporary philosophers will be considered.

PHI 3601 Ethics (3). What is intrinsically good? What ought one to do? How are moral claims justified? Competing views of major philosophers are considered.

PHI 3640 Environmental Ethics (3). Examines philosophical and ethical perspectives on human interaction with the natural world.

PHI 3638 Contemporary Ethical Issues (3). After a review of basic questions regarding ethics, this course considers special ethical problems in contemporary society from the perspective of one or more philosophers or systems of ethics. Topics will be selected and announced in advance.

PHI 3700 Philosophy of Religion (3). This course investigates whether or not religious beliefs can be rationally justified. Such topics as the nature of God, the problem of evil, religious experience, and the relationship of faith to reason will be explored.

PHI 3762 Eastern Philosophical and Religious Thought (3). This introductory course examines the development of philosophical and religious thought in the East from ancient to modern times. Hinduism, Buddhism, Confucianism, Taoism, and other major viewpoints will be considered, in themselves and in comparison with Western forms of thought.

PHI 3800 Philosophy of Art (3). An introduction to problems in Philosophy of Art, with emphasis on those problems which are especially relevant to appreciation and criticism in the arts. Typical problems include the relation between form and content, truth and falsity in art, the nature of emotion in art and of the aesthetic response, as well as the nature of art itself. This course will include a study of selections from the writings of major thinkers and the consideration of those works of art which are relevant to this study.

PHI 4130 Symbolic Logic (3). This course provides an introduction to symbolic logic. Emphasis is upon both the formal techniques of analysis of argument and upon the theoretical aspects of formal logic.

PHI 4161 Philosophy and Probability (3). An introduction to the philosophical applications of elementary probability theory. Topics include mathematical probability, rational decision making, the foundations of science, and Pascal's wager.

PHI 4221 Philosophy of Language (3). The subject matter concerns the relations between language, thought, and the world. Topics to be studied include reference, meaning, speech acts, and propositional attitudes. Also to be considered are the implications of claims here for issues in other areas of philosophy.

PHI 4222 Philosophy of Dialogue (3). This course examines the meaning, the foundations, the limitations of dialogue, and the dialogical structure of expression and human relationships based on the philosophy of Martin Buber. It includes a philosophical analysis of the dialogical principle and the application of its insights to the problems of human living and knowing.

PHI 4321 Topics in the Philosophy of Mind (3). This course examines selected issues in the philosophy of mind. Topics include the nature and value of the passions, self and self-deception, theory of action, etc. May be repeated. Prerequisite: Instructor's permission or PHI 3320.

PHI 4370 Topics in Epistemology (3) Study of a focused topics in epistemology (such as: a priori knowledge and justification; certainty; or skepticism). This course may be repeated.

PHI 4633 Biomedical Ethics (3). After examining the foundations of ethics, this course will consider the human and ethical dimensions of current issues in the life sciences, such as the meaning of human living and suffering, ethics of genetic control, death and dying, personal responsibility in the medical and counseling professions.

PHI 4764 Religious Experience (3). An introduction to philosophical thought about religious experiences. After a brief survey of the major types of religious experiences, issues about their nature and cognitive status are examined.

PHI 4836 Philosophy of Time (3). An analysis of the nature of time. Topics include the "passage" of time, the asymmetry between past and future, Zeno's paradoxes, and philosophical implications of the special theory of relativity.

PHI 4882 Philosophy io Literature (3). Philosophical implications of selected works and the impact of philosophical concepts such as the self, death, identity, alienation, responsibility, freedom, and the absurd.

PHI 4910 Independent Research (1-6). Topics will be selected to meet the academic needs of the individual student. Prerequisite: Permission of the instructor.

PHI 4930 Special Topics (3). In-depth study of topics of special interest in philosophy.

PHI 4935 Philosophy Seminar (3). This seminar is designed for majors and other qualified students approved by the Department, and will be guided by one or more faculty members. Topic will be selected and announced in advance. The number of participants will be limited.

PHI 5934 Special Topics (3). Topics will be selected to meet the academic needs of groups of students.

PHM 3040 Philosophical Anthropology (3). This course attenpts to interpret philosophically scientific perspectives concerning the nature of man and the human condition. It seeks to elucidate the basic qualities that make man what he is and distinguish him from other beings.

PHM 3200 Social and Political Philosophy (3). The nature of society and the state, authority of society and the state over the individual, political

obligation, legitimacy of government, and idea of social contract are considered.

PHM 3400 Philosophy of Law (3). After an analysis of the nature of law and judicial reasoning in the light of fundamental alternative interpretations, basic topics of legal philosophy will be considered, such as freedom and rights, responsibility and punishment, rule of law and civil disobedience, legality and justice.

PHM 3500 Philosophy of History (3). After exploring the definitions, dimensions and interrelations of philosophy and history, students will examine major philosophies of history. The social responsibility of the historical narrative and the philosophical assumptions of historiographies will be discussed.

PHM 4020 Love and Sexuality (3). This course analyzes the nature and meaning of love and sexuality, and studies the basic problems in human sexual living, such as love and the man-woman relationship, the formation of sexual union, and attitudes toward love and sexuality in contemporary society.

PHM 4050 Philosophy of Death (3). This course analyzes the meaning of death and man's attitude towards death and the dying. It examines how philosophy can share in the new confrontation between man and his death, and shows the ways philosophical thinking contributes to the discovery of an authentic attitude towards the phenomenon of death as part of human living.

PHM 4123 Philosophy and Feminism (3). A conceptual analysis of alternative feminist views. Topics include the goals of the feminist movement, sexist theories on women's nature, sexual stereotypes and androgyny, the nature of oppression, sexism, racism and homophobia.

PHM 4360 Topics in Political Philosophy (3). Examines a selected topic in political philosophy, such as: justice, democracy, liberty, or an important thinker. May be repeated. Prerequisites: PHM 3200 or permission of the instructor.

PHM 4430 Topics in Philosophy of Law (3). Examines a focused topic in philosophy of law, such as: punishment, legislation of morality, the rule of law, or an important thinker. May be repeated.

PHP 3840 Chinese and Japanese Philosophy (3). Metaphysical and ethical theories of the three main philosophical systems of China, namely, Classical and neo-Confucianism, Taoism, and Chinese Buddhism are examined. For Japanese philosophy, Shintoism is included.

PHP 4510 Marxism (3). This course examines the philosophic insights of Marx and the main trends (anthropological, social, existential) in contemporary Marxism. It includes an analysis of the Marxist interpretation of alienation, work, and human authenticity.

PHP 4782 Phenomenology (3). This course analyzes the method, the basic philosophical insights and the applications of 20th century phenomenology. It includes the phenomenological analysis of knowing as well as basic questions regarding the nature of reality together with the study of fundamental texts from Husserl, Heidegger, and Merleau-Ponty.

PHP 4784 Analytic Philosophy (3). This course examines the 20th century Anglo-American tradition of approaching philosophic problems by the methods of linguistic analysis. It will include study of techniques of linguistic analysis and an evaluation of their adequacy in dealing with meaning and truth, the mind-body problem, and free will.

PHP 4786 Existentialism (3). This course examines the origin, basic philosophical insights, and influence of the mainstreams of modern existentialism. It includes the study of fundamental texts of Kierkegaard, Nietzsche, Sartre, Jaspers, and Camus.

PHP 4788 Contemporary French Philosophy (3). Main trends (hermeneutics, postmodernism, deconstruction) in twentieth century French philosophy, with emphasis on seminal thinkers, e.g., Levinas, Derrida, Ricoeur, Foucault, Irigaray.

Physics

Stephan L. Mintz, *Professor and Chairperson*
Werner Boeglin, *Assistant Professor*
Richard A. Bone, *Professor*
Yesim Darici, *Associate Professor*
Rudolf Fiebig, *Professor*
Bernard Gerstman, *Professor*
Kenneth Hardy, *Professor*
Laird H. Kramer, *Assistant Professor*
Pete C. Markowitz, *Assistant Professor*
Oren Maxwell, *Professor*
Brian A. Raue, *Assistant Professor*
Joerg Reinhold, *Assistant Professor*
John W. Sheldon, *Professor*
Caroline E. Simpson, *Assistant Professor*
Nongjian Tao, *Associate Professor*
Walter Van Hamme, *Associate Professor*
Xuewen Wang, *Associate Professor*
James R. Webb, *Associate Professor*
Jiandi Zhang, *Assistant Professor*
Yifu Zhu, *Associate Professor*

Bachelor of Science

Degree Program Hours: 120

This program prepares students for careers as professional physicists in industry, government, or graduate study in physics, engineering, or material science. It also prepares students for teaching careers. Students interested in teacher certification should contact the College of Education.

Lower Division Preparation

Required Courses

Common Prerequisites

CHM 1045	General Chemistry I
CHM 1045L	General Chemistry Lab I
CHM 1046	General Chemistry II
CHM 1046L	General Chemistry Lab II
MAC 2311	Calculus I
MAC 2312	Calculus II
MAC 2313	Calculus III
PHY 2048	Physics with Calculus I
PHY 2048L	Physics with Calculus Lab I
PHY 2049	Physics with Calculus II
PHY 2049L	Physics with Calculus Lab II

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program (60)

PHY 3123	PHY 3124 Modern Physics	6
PHY 3123L	PHY 3124L Modern Physics Labs	2
PHY 3503	Thermodynamics	3
PHY 4221	PHY 4222 Mechanics	6
PHY 4323	PHY 4324 Electromagnetism	6
PHY 4604	PHY 4605 Quantum Mechanics	6
PHY 4810L	Senior Physics Lab	3
PHY 4905	PHY 4906, PHY 4907 Independent Study	3
Approved electives in experimental or theoretical physics		6
MAC 2313	Multivariable Calculus	3
MAP 2302	Differential Equations	3
Electives (Physics or Non-Physics)		13

Minor in Physics

This program is designed for students who desire additional capabilities in physics beyond the basic sequence. This program is especially recommended for chemistry, mathematics, and engineering/technology majors.

PHY 2048,	PHY 2049 Physics with Calculus	10
PHY 2048L,	PHY 2049L Physics with Calculus Lab	2
PHY 3123,	PHY 3124 Modern Physics	6
PHY 3123L,	PHY 3124L Modern Physics Labs	2
Additional approved courses		3

Cooperative Education

Students seeking the baccalaureate degree in physics may also take part in the Cooperative Education Program conducted in conjunction with Career Planning & Placement. The student spends several semesters fully employed in an industrial or governmental physics laboratory. For further information consult the Department of Physics or Career Planning & Placement.

Course Descriptions

Definition of Prefixes

AST-Astronomy; MET-Meteorology PHS-Physics/Specialized; PHY-Physics; PHZ-Physics; PSC-Physical Sciences; ENU-Nuclear Engineering. F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

AST 2037 Intelligent Life in the Universe (3). Examines the possibility of extraterrestrial life in terms of the probability of the existence of planets in other solar systems, the conditions necessary for life, and means of communication. (F or S)

AST 2100 Solar System Astronomy (3). General principles of Astronomy with emphasis on the structure and evolution of the Solar System, the laws of planetary motion, and the physical aspects of the sun, plancts, and interplanetary debris. Prerequisites: College Algebra and Geometry. (F,S,SS)

AST 2100L Solar System Astronomy Laboratory (1). Laboratory section of AST 2100. Outdoor observing of the moon, planets and indoor exercises including celestial positions and time, the moon's orbit, planetary motions, comparative planetology. Corequisite: AST 2100. (Lab fees assessed) (F,S,SS)

AST 2201 Stellar Astronomy (3). General principles of Astronomy with emphasis on the structure and evolution of stars, stellar systems, galaxies and the universe. Topics include stellar birth and death, neutron stars and black holes, galactic distances and the expansion of the universe. Prerequisites: College Algebra and Geometry. (F,S,SS)

AST 2201L Stellar Astronomy Laboratory (1). Laboratory section of AST 2201. Outdoor observing of stars, constellations, binary and variable stars, star clusters, nebulae and indoor exercises including radiative properties of the stars, spectra, stellar and galactic distances, Hubble's Law. Corequisite: AST 2201. (Lab fees assessed) (F,S,SS)

AST 3213 Modern Astrophysics (3). An introduction to the structure of stars and galaxies and the evolution of the universe as a whole. Topics will include atomic spectra, stellar classifications, galactic structure, and cosmology. Prerequisites: PHY 2048, 2049. (F or S)

AST 5215 Stellar Astrophysics (3) Topics in Stellar Astrophysics, in greater detail and depth than similar topics in AST 3213. Emphasis on current stellar structure, evolution models and the underlying observational data.
Prerequisites: PHY 3124, PHY 3503, PHY 4324, PHY 4222 or equivalent. (F or S)

AST 5405 Extragalactic Astrophysics (3). Topics in extragalactic astrophysics, in greater detail and depth than similar topics in AST 3213. Emphasis

on galactic structure and evolution, quasars and cosmology. Prerequisites: PHY 3124, PHY 3503, PHY 4324, PHY 4222 or equivalent. (F or S)

AST 5507 Celestial Mechanics (3). Principles of classical Newtonian mechanics applied to the motions of planets, satellites, and interplanetary space probes. Prerequisites: PHY 4222 or equivalent. (F or S)

ENU 4101 Introduction to Nuclear Reactors (3). An elementary course in nuclear fission reactor theory and power plant operation. An overview of the relevant nuclear processes and their application to reactor design. Prerequisites: PHY 2048, 2049.

MET 2010 Meteorology and Atmospheric Physics (3). Physics of the Earth's atmosphere and weather including energy and heat transfer, radiation, temperature and pressure changes and the development of storms, atmospheric optical effects, and weather forecasting. Prerequisite: High school algebra. (F,S)

MET 2010L Meteorology and Atmospheric Physics Laboratory (1). Practical weather analysis including fronts, local severe weather, hurricanes, also elementary analyses and interpretation of weather maps, satellite imagery, radar data. Corequisite: PHY 2010. (F,S)

PHS 4303 Nuclear Physics (3). A treatment of the current state of the nuclear theory problem and a discussion of modern experimental methods. Prerequisites: PHY 3123, 3124.

PHY 2023 Survey of General Physics (3). Units, quantities, Newton's laws, work, momentum, fluids, heat, gas laws, waves, charge and current, electric fields, circuits, light, atomic and nuclear physics. Prerequisites: Algebra, trigonometry (high school). (F,S,SS)

PHY 2048, PHY 2049 Physics with Calculus (5,5). Basic physics with calculus sequence. PHY 2048 will cover kinematics, Newton's Laws, conservation laws, gravitation, fluids, sound, and thermodynamics. Prerequisite: MAP 2311. Pre or Co-requisite: MAC 2312. PHY 2049 will cover electricity and magnetism, field theory, geometrical and wave optics. (F,S,SS)

PHY 2048L, PHY 2049L General Physics Laboratory I, II (1,1). Laboratory sections of PHY 2048, 2049, PHY 2053, 2054. Prerequisites or Corequisites: PHY 2048, PHY 2049, PHY 2053, PHY 2054. (Lab fees assessed) (F,S,SS)

PHY 2053, PHY 2054 Physics without Calculus (4,4). A general introductory course using a non-calculus approach. PHY 2053 covers kinematics, Newtonian mechanics, properties of fluids, thermodynamics, and wave motion. PHY 2054 covers electricity and magnetism, geometrical and wave optics and the structure of matter. Prerequisites: College algebra, trigonometry, and analytic geometry. (F,S,SS)

PHY 3123, PHY 3124 Modern Physics I and II (3,3). Recent developments in physics are discussed. Subject matter includes: review of classical physics, special relativity, four-vectors, wave-particle duality, the hydrogen atom, many electron atoms, nuclear instrumentation, nuclear structure, nuclear reactions, elementary particles, introduction to quantum mechanics, and solid state physics. Prerequisite: PHY 2049. (F) (Modern Physics I); (S) (Modern Physics II)

PHY 3123L, PHY 3124L Modern Physics Laboratory I and II (1,1). Laboratory courses to accompany Modern Physics I and II consisting of experiments in atomic and nuclear physics. Pre- or corequisites: PHY 3123 and PHY 3124. (F) (Modern Physics Lab I); (S) (Modern Physics Lab II)

PHY 3424 Optics (3). General formulation of geometrical optics including matrix techniques, interference phenomena, and the theory of Fraunhofer and Fresnel diffraction are among the topics covered. Prerequisites: PHY 2048, 2049.

PHY 3503 Thermodynamics (3). Fundamental principles of thermodynamics, the first, second, and third laws, free energy, entropy, the chemical potential, phase rule and its applications. Prerequisites: PHY 2048, 2049, CHM 1045, 1046. (F)

PHY 3772 Electronics (3). Solid state theory and the theory of circuits, circuit operation and design in lecture and laboratory sessions. Prerequisites: PHY 2048, 2049.

PHY 3949, PHY 4949 Cooperative Education in Physics (1-3). One semester of full-time supervised work in an outside laboratory taking part in the University Co-Op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluation will be required of each student. (F,S,SS)

PHY 4221, PHY 4222 Intermediate Classical Mechanics I & II (3,3). Laws of motion, statics of particles and rigid bodies, motion of particles in one, two, and three dimensions, systems of particles, rigid bodies in a plane, central forces. Accelerated reference systems, rigid body in three dimensions, generalized coordinates, Lagrangian and Hamiltonian formulations of mechanics, vibrating systems, and normal coordinates. Prerequisites: MAC 2313, PHY 2048, 2049. (F) (Intermediate Classical Mechanics I); (S) (Intermediate Classical Mechanics II)

PHY 4323, PHY 4324 Intermediate Electromagnetism I and II (3,3). The theory of electromagnetic fields and waves is developed from basic principles. Vector calculus, Coulomb's law, Gauss's Law, electrostatic potential, dielectrics, solutions to Laplace's and Poisson's equations, magnetic induction, vector potential, magnetic materials, Maxwell's equations, and propagation of waves in space and various media are discussed. Prerequisites: MAC 2313, PHY 2048 and 2049.(F) (Intermediate Electromagnetism I); (S) (Intermediate Electromagnetism II)

PHY 4513 Statistical Thermodynamics (3). Review of the fundamental laws of thermodynamics applied to simple systems. Elementary kinetic theory of gases applied to diffusion, viscosity, thermal and electrical conductivity. Boltzmann, Fermi-Dirac and Bose-Einstein distribution functions applied in the Boltzmann limit to the calculation of thermodynamic variables. Prerequisites: MAC 2313, PHY 2048, 2049.

PHY 4604 Quantum Mechanics I (3). A comprehensive introduction to quantum mechanics. Wave mechanics applied to standard one dimensional problems and the hydrogen atom. Prerequisites: PHY 3124 or permission of the instructor and MAP 2302, MAC 2313, and PHY 2049. (F)

PHY 4605 Quantum Mechanics II (3). General matrix formalism, angular momentum, symmetries, perturbation theory and variational methods, an introduction to relativistic theory and theory of fields. Prerequisite: PHY 4604. (S)

PHY 4752C Introduction to Scientific Instrumentation (3). The student learns to set up and operate such standard pieces of laboratory apparatus as bridges, amplifiers, oscilloscopes, frequency counters, flowmeters, and thermocouple circuits utilizing chart recorders. A background in general physics is required.

PHY 4810L Senior Physics Lab (3). Advanced laboratory topics are treated. Modern physics laboratory equipment is used and the student is introduced to current laboratory practice. Prerequisites: PHY 2048 and 2049. (S)

PHY 4905, PHY 4906, PHY 4907 Independent Study (3). The student works under the supervision of a faculty member on subject matter of mutual interest. Instructor's permission is required.

PHY 4936, PHY 4937, PHY 4938 Special Topics (VAR). A study of topics of special physics interest.

PHY 5115 Mathematical Physics I (3). Methods of solution for problems in mathematical physics: Variational principles, complex variables, partial differential equations, integral equations, and transforms. Prerequisites: MAC 2313, MAP 2302. (F)

PHY 5116 Mathematical Physics II (3). Additional solution methods in mathematical physics: Perturbation methods, Laplace's and Poisson's Equations, waves, special functions, vector fields, vector waves. Prerequisite: PHY 5115. (S)

PHY 5235 Nonlinear Dynamics and Chaos (3). Introduction to the universal behavior of classical systems described by nonlinear equations. Prerequisites: PHY 4222, MAA 4211. (F or S)

PHY 5240 Advanced Classical Mechanics (3). Advanced formulations of the equations of motion and their applications: the central field problem, rigid body dynamics, oscillations and continuous systems. Prerequisite: PHY 4222. (F)

PHY 5346 Advanced Electromagnetic Theory I (3). Advanced treatment of classical electromagnetism: Electrostatics, Green's function, Laplace's equation, multipole expansion, magnetostatics, Maxwell's equations, waves. Prerequisite: PHY 4324. (F)

PHY 5347 Advanced Electromagnetic Theory II (3). Additional topics in classical electromagnetism: Wave guides, radiating and diffracting systems, Kirchoff's integral for diffraction, covariant formulation of field equations. Prerequisite: PHY 5346. (S)

PHY 5446 Laser Physics (3). Principles of lasers and laser applications, including atom-field interactions, stimulated emission and dipole oscillators, optical resonators and electromagnetic modes, semi-classical laser theory, and specific laser systems. Prerequisite: PHY 4605. (F or S)

PHY 5667 Nonperturbative Quantum Field Theory (3). Euclidean QFT, renormalization group, local gauge symetry, lattice regularization, Wilson action, fermion fields, expansion schemes, numerical algorithms, hadron properties, recent developments. Prerequisites: PHY 4605.

PHY 5930 Seminar in Physics (1-3). A series of specialized lectures/seminars on selected topics in Physics/Astro-Physics. Prerequisites: Permission of Department.

PHY 5936 Special Topics Research (1-10). Participation in an original investigation in theoretical or experimental physics/astro-physics under direct faculty supervision. Prerequisite: Permission of the instructor.

PHY 5937, PHY 5938 Seminar in Special Topics (3). Seminar work under the supervision of a faculty member on subject material of mutual interest.

PHY 5940 Physics Graduate Teaching Workshop (1). The teaching of physics laboratories. Includes practice of lab experiments, use and adjustment of lab equipment and explanation of departmental grading policy. Supplemented by outside lectures on university policies. (F)

PHZ 4710 Introduction to Biophysics (3). Physical investigation of biological molecules with special reference to structure and function of protein, biomembranes and visual receptors. Prerequisite: PHY 3124 or CHM 3411.

PHZ 5130 Theoretical Treatment of Experimental Data (3). Statistical analysis of physical processes and statistical tests, with particular emphasis on instrumentation-related problems. Mathematical modeling and computer simulation. Prerequisite: Undergraduate statistics course, or equivalent, or permission of the instructor.

PHZ 5151 Computational Physics (3). Physical systems by means of computer simulation. Monte Carlo, molecular dynamics, percolation, random systems, chaos, criticality, guage fields. Prerequisite: PHY 5115 and PHY 5116.

PHZ 5234 Atomic and Molecular Collision Phenomena (3). Investigation of atomic and molecular collision phenomena: Kinetic theory, elastic scattering, inelastic scattering, excitation and ionization, heavy particle collisions. Prerequisites: PHY 4605 and PHY 4222. (F or S)

PHZ 5304 Advanced Nuclear Physics (3). Fundamental properties of nuclei, nuclear forces, nuclear models, radioactivity, weak processes and nuclear reactions. Prerequisite: PHY 4604. Corequisite: PHY 4605. (F or S)

PHZ 5405 Solid State Physics (3). Crystalline form of solids, lattice dynamics, metals, insulators, semi-conductors, crystalline surfaces, and amorphous materials. Prerequisites: PHY 3124 or CHM 3411. (F or S)

PHZ 5505 Low Energy Plasma Physics (3). The investigation of the kinetics of rarefied gases and thermal plasmas: Phase space, random currents, orbit theory, plasma sheaths, radiation, the pinch effect. Prerequisites: PHY 3503, PHY 4324, and PHY 4222.

PHZ 5506 Plasma Physics (3). An introduction to plasma fundamentals, the Boltzmann equation, the hydrodynamic equations, orbit theory, the interaction of electromagnetic waves with plasmas, the pinch effect and instabilities. Prerequisite: PHY 2049.

PHZ 5606 Special Relativity (3). A detailed study of special relativity: Lorentz transformations, relativistic electrodynamics. Prerequisite: PHY 3124.

PHZ 5607 General Relativity (3). General relativity using differential geometry and tensor analysis. Topics include Einstein's field equations and their solutions, applications and observational tests. Black Holes and cosmology are also discussed. Prerequsite: PHY 4222 and PHY 4605.

Political Science

John Stack, *Professor, Chair, and Director, Institute for Public Policy and Citizenship Studies*
Colton Campbell, *Assistant Professor*
Virginia Chanley, *Assistant Professor*
Ronald Cox, *Associate Professor*
Keith Dougherty, *Assistant Professor*
Eduardo Gamarra, *Professor and Director, Latin American and Caribbean Center*
Joel Gottlieb, *Associate Professor*
Ivelaw Griffith, *Associate Professor and Associate Dean*
Kevin Hill, *Associate Professor*
Antonio Jorge, *Professor*
Jeanne Kates, *Instructor*
Mary Beth Melchior, *Assistant Professor*
Dario Moreno, *Associate Professor*
Brian Nelson, *Associate Professor*
Timothy Power, *Assistant Professor*
Richard Olson, *Professor and We Will Rebuild Eminent Scholar, International Hurricane Center*
Nicol Rae, *Associate Professor*
William Reno, *Associate Professor*
Mark Rosenberg, *Professor and Provost*
Cheryl Rubenberg, *Associate Professor*
Rebecca Salokar, *Associate Professor*
Judith H. Stiehm, *Professor*
Mary Volcansek, *Professor and Graduate Program Director*
Christopher Warren, *Associate Professor*

Bachelor of Arts in Political Science

Degree Program Hours: 120

The major in Political Science provides students the opportunity to acquire a broad education that will equip them to adapt to a wide variety of careers. The program for majors is designed to encourage the analysis of theories, institutions, and processes of political systems in the context provided by the social sciences; to stimulate a grasp of the broad sweep of political science as a discipline; to develop a continuing and responsible interest in political activity and public affairs; to provide the opportunity to acquire a fundamental understanding of political science as a basis for citizenship, a career in government, or professional study and service; and to stimulate the qualified student's interest in graduate study in political science.

The curriculum is designed to expose students to the various areas of Political Science and to allow for some specialization. Students are encouraged to create a blend of courses that fit their interests. You should work with the undergraduate advisor in selecting courses.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including the successful completion or waiver of the CLAST, 60 semester hours, and a minimum 2.0 Grade Point Average.

Curriculum for Political Science Majors

Students should obtain and read the "Political Science Advising Guide" from the department office. A minimum of 30 credits of upper division work (3000 level and above) is required for a major in Political Science, of which 6 credits must be at the 4000 level (excluding independent study and internship credits).

In addition, two 2000 level courses are required for a student to meet both the department's prerequisite requirements for majors as well as the state mandated "Common Prerequisites" (see below). These courses should be taken as early as possible in preparation for upper division work in the major. POS 2042-American Government (or its equivalent) is required of all Political Science majors. This course will also meet one of the two state mandated Common Prerequisites. The second Common Prerequisite can be fulfilled by taking either CPO 2002 Introduction to Comparative Politics, or INR 2002 Dynamics of World Politics (or their equivalents). These requirements can normally be met through course work at the communiy college level, or can be taken at FIU. Students should be mindful of the further requirement of the College of Arts and Sciences, that a minimum of 48 upper division credits (3000 level and above) is necessary for graduation.

No specific upper division courses are required. Rather, courses in Political Science must be distributed so that five courses meet the Breadth requirement and five other courses meet the Political Science Electives requirement, of which two (6 credits) must be at the 4000 level (excluding independent study and internship credits).

The student must earn a grade of 'C' or better in all Political Science courses credited toward the major. A grade of 'C-' will not fulfill the requirements of the major. Students choosing to major in Political Science must officially declare their major by completing applicable forms. See the department secretary for assistance.

Common Prerequisites

Common Prerequisites are those mandated by the state for Political Science majors. In order to conform with both state and departmental requirements, students must take the following:

POS 2042	American Government (or its equivalent)

and one of the following two courses:

CPO 2002	Introduction to Comparative Politics (or its equivalent)
INR 2002	Dynamics of World Politics (or its equivalent)

These courses do not count toward the 30 credits of upper division work required for the major.

Requirements for a Major

I. Breadth Requirement

This is designed to acquaint all majors with the five general fields of Political Science. One three-semester hour course must be taken in each of the following fields, for a total of 15 semester hours.

American Politics (AP)-This Breadth area can be met **only** by one of the following courses:

POS 3152	Urban Politics	3
POS 3413	The Presidency	3
POS 3424	The Legislative Process	3
POS 3443	Political Parties	3

Judicial Politics (JP)-This Breadth area can be met **only** by one of the following courses:

POS 3283	The Judicial Process	3
POS 3603	Constitutional Law: Powers	3
POS 3604	Constitutional Law: Limits	3

Comparative Politics (CP)-This Breadth area can be met **only** by one of the following courses:

CPO 3010	Comparative Politics Theory and Practice	3
CPO 3055	Authoritarian Politics	3
CPO 3103	Politics of Western Europe	3
CPO 3204	African Politics	3
CPO 3304	Politics of Latin America	3
CPO 3403	Politics of the Middle East	3
CPO 3643	Russian Politics	3

International Politics (IP)-This Breadth area can be met **only** by one of the following courses:

INR 3102	American Foreign Policy	3

INR 3203	World Politics	3

Political Theory and Methodology (PT)-This Breadth area can be met only by one of the following courses:

POT 3013	Ancient and Medieval Political Theory	3
POT 3054	Modern Political Theory	3
POT 3064	Contemporary Political Theory	3
POT 3204	American Political	
POT 3302	Political Ideologies	3
	Thought	3

II. Political Science Electives Requirement

Five upper division Political Science courses (3000 level and above), of which two (6 credits) must be at the 4000 level are required, for a total of 15 credits. No more than 6 credits in independent study and/or internship work can be applied toward the major.

Minor in Political Science

POS 2042 (or its equivalent) is a prerequisite for a minor in Politcal Science. Beyond the prerequisite, the minor consists of any five upper division (3000 level and above) courses in Political Science, for a total or 15 upper division credits. All courses must be passed with a 'C' or better grade. A grade of 'C-' will not fulfill the requirements of the minor. Neither independent study nor internships will count toward the minor. Students should select specific courses in consultation with their major advisor and a Political Science advisor. Students must apply for a minor by completing a Request for Minor Form and have it signed by their Major and Minor Advisors.

Pre-Law Students

The Department of Political Science recognizes the interests and needs of the undergraduate major who plans to attend law school. The basic skills important to a pre-law student include:

(1) how to think logically,
(2) how to read intelligently, and
(3) how to express oneself clearly.

These skills are developed in a number of disciplines. Beyond these basic skills, the department encourages students to acquire a broad background in political science rather than to select only courses that deal with public law.The department publishes a pre-law handbook that answers general questions for all students and the department's pre-law advisors will counsel students on specific concerns.

In selecting electives, students should remember that the LSAT and law school require the ability to read with comprehension of concepts and logic and to express oneself with clarity and precision. Whether or not a given student will benefit from a particular elective is a question best answered by the student in close consultation with an advisor. Courses in History, Philosophy, Economics, Sociology, Psychology, Math and English will probably all give the student practice in relevant skills. Breadth of preparation is important. Whether a particular course in logic, writing or another area is the best choice can only be answered on an individual basis.

Public Affairs Internships

The Department provides opportunities for practical work-study experiences in governmental and nongovernmental agencies. Three categories of internships are available to qualified students:

1. Judicial Internships (Prerequisite: POS 3283-Judicial Process or equivalent)
2. Legislative Internships (Prerequisite: POS 3424-Legislative Process or equivalent)
3. Campaign Internships (In election year).

Standards for enrollment as an intern student include:

Enrollment is by permission of the instructor only. A student wishing to enroll as a public affairs intern should consult with the appropriate faculty member early in the preceding semester and receive written permission to enroll.

A Political Science major may count a maximum of six credit hours in internships toward his/her major.

All public affairs internships in political science will be on a Pass/Fail basis.

For further information on internships, contact your political science advisor.

Upper Division Transfer Credit

Students will generally receive transfer credit for junior and senior level courses in political science with a grade of 'C' or higher. While a student may transfer up to 30 credits of upper division work, the department will only accept 15 credits towards the Political Science curriculum. All decisions to recognize transfer credit rest with the faculty.

Undergraduate Advising Program

The Department of Political Science has an Undergraduate Advisor available to answer student questions regarding degree requirements, transfer credit, and graduation. All new majors and minors should make an appointment to meet with the Undergraduate Advisor in advance of their enrollment in the program. Prior to registering for their final semester of courses, graduating seniors should also meet with the Undergraduate Advisor for a graduation check to review their records. Appointments for undergraduate and pre-law advising are available through the department secretary. In addition, all Political Science faculty are willing to meet with students to discuss the prospects of graduate studies and career planning.

Course Descriptions

Definition of Prefixes

CPO-Comparative Politics; INR-International Relations; POS-Political Science; POT-Political Theory; PUP-Public Policy; URP-Urban Planning. Courses that meet the Breadth Requirements for the major are identified by subfield following the course title: (AP) American Politics; (JP) Judicial Politics; (CP) Comparative Politics; (IP) International Politics; and (PT) Political Theory.

CPO 2002 Introduction to Comparative Politics (3). Analysis of major theories of comparative politics including development, state building, institutions, patterns of political interaction and comparative elites. Focus on Latin America and the Third World.

CPO 3010 Comparative Politics: Theory and Practice (CP) (3). Examines major theories and methods of comparative politics, focusing on divergent political systems (Democracy, Authoritarianism, Totalitarianism). Countries/regions studied vary with instructor.

CPO 3055 Authoritarian Politics (CP) (3). The purpose of this course is to identify the conceptual and empirical characteristics of authoritarian regimes. An ideal typical authoritarian regime will be established, followed by case study analyses of modern authoritarian systems, like those of Brazil, Mexico, and Portugal. The course is designed to analyze the circumstances giving rise to non-totalitarian modern dictator-

ships, their political dynamics, and their survival capability.

CPO 3103 Politics of Western Europe (CP) (3). Studies of political systems of the major European countries on a comparative basis. Attention is focused on such factors as political party systems, the cabinet form of government, and the politics of the Common Market. Considers the implications of the impact of mass society on these nations. Enables the students to better understand the nations which have supplied many of the theoretical foundations of modern politics.

CPO 3104 Politics of the European Union (3). Traces the development of the governmental forms and structures in the evolution of the European Union and compares them to governmental structures in other regional and global multinational organizations.

CPO 3204 African Politics (CP) (3). Compares the politics of Sub-Saharan Africa, and the Republic of South Africa and addresses questions of economic development, the colonial legacy, and the impact of traditional social patterns.

CPO 3304 Politics of Latin America (CP) (3). This course analyzes the multiple structures, processes, and groups which are relevant to an understanding of Latin American political economy. Of special interest are the political impacts of land and wealth inequality and economic dependency. The dynamics of Latin American politics are considered, with an emphasis on the role of the military and the church. Alternate strategies for modernizing the region are considered.

CPO 3403 Politics of the Middle East (CP) (3). This course will focus on the social, cultural, and political aspects of the Middle East region. Through an understanding and an interweaving of these complex facets, a student should gain a foundation and background for comprehension of the contemporary conflict which pervades this mercurial region.

CPO 3502 Politics of the Far East (3). An intensive examination of the major political institutions of China, Japan, and Korea. A critical analysis of changing aspects of traditional relationships in Far Eastern political culture and major reform movements in contemporary Far Eastern politics. Allows the student to better understand nations whose political development will be an important factor in global development.

CPO 3541 Politics of China (3). This course introduces students to China's political history from 1840 and analyzes politics in the People's Republic of China with special emphasis on political and economic development, socio-economic and political conflict, ideology, and foreign policy.

CPO 3553 Government and Politics of Japan (3). Introduction to Japanese politics. Special attention is given to the Japanese variant of democracy, the capitalist state, and foreign policy.

CPO 3643 Russian Politics (CP) (3). Examines the political structure and institutions of Russia. Attention is paid to the historical and cultural aspects of the structure and use of power.

CPO 4034 The Politics of Development and Underdevelopment (3). This course is an analysis of the causes of development and underdevelopment in Third and Fourth World countries. It includes an analysis of major theoretical approaches to understanding development problems, as well as an analysis of the roles of major national and non-national actors.

CPO 4053 Political Repression and Human Rights (3). Examination of domestic factors resulting in political repression and violations of human rights. American, European, and South American examples will be used.

CPO 4057 Political Violence and Revolution (3). An examination of major historical instances and modern expressions of political violence; discussion of revolution from a comparative perspective. Attention will focus on the social origin and political determinants of such events.

CPO 4062 Comparative Judicial Politics (3). An examination of the various modes of dispute settlement and rule adjudication cross-culturally. Emphasis is on the similarities and differences of judicial behavior, judicial decision-making, judicial recruitment, and judicial powers in cross-national analysis.

CPO 4072 Comparative Electoral Behavior (3). Public opinion, voting choice, and electoral patterns from a comparative and historical perspective. Attention will focus on West Europe and Latin America. Differences from North American trends and patterns will also be detailed.

CPO 4165 Italian Politics (3). An examination of the political structure and traditions of Italy since WW II. Particular attention is given to the internal development of democracy as a model for other nations. Emphasis on the politics of pluralism.

CPO 4303 Politics of South America (3). A cross-national discussion of the political systems and cultures of the Latin American nations, with special emphasis on the larger countries. Attention is given to the role of the military and to the problem of violence. Designed to give the student an overview of the political life of the nations with whom we share this hemisphere.

CPO 4323 Politics of the Caribbean (3). Studies the political system of the major British, French, Dutch, and Spanish areas in the Caribbean basin. Attention is focused on such factors as political party democracies in a non-industrial setting. The paradoxes between modernity and tradition throughout the developing Caribbean, and the relationship between politics, economics, and culture are discussed. The student is helped to understand the dynamics of change in an important area of the world and to compare those dynamics with change in his own country.

CPO 4333 Politics of Central America (3). This course analyzes the historical and contemporary political dynamics of the five countries of Central America. Special attention is given to problems of development and modernization within the context of the region's economic dependence on the United States. Special attention is given to the problem of political restraints on the modernization process and to those regional arrangements which have been created to solve the area's problems. The student will develop a better understanding of a region which has close ties to the United States.

CPO 4340 Politics of Mexico (3). This course analyzes the structure and process of the Mexican political system from four perspectives: 1) Mexico's revolutionary heritage; 2) its formal governmental structure; 3) formal political relations; and 4) the structure and process of Mexican political economy.

CPO 4360 Cuban Politics (3). Examines the course of twentieth century Cuban politics. The course is subdivided into five parts covering the three periods of relatively stable politics and the two major revolutions.

CPO 4401 The Arab-Israeli Conflict (3). This course provides the student with an introduction to the political roots of the Middle East conflict, and examines the dilemmas of finding a solution by focusing on the domestic and international constraints imposed upon the major actors.

CPO 4404 Politics of North Africa (3). An examination of the politics of the Arab-Islamic countries of North Africa. Attention is given to pre-colonial politics and subsequent European penetration as bases for understanding contemporary politics.

CPO 4461 Politics of Eastern Europe (3). An examination of the historical and contemporary political dynamics of the countries of Eastern Europe. Special attention is given to the process of "democratization" and the effort to move towards a liberal-democratic, capitalist order.

CPO 4741 Comparative Political Economy (3). Examines the theoretical approaches used to assess the relationship between political institutions and private economic interests in advanced, industrial countries and the less developed world.

CPO 4930 Topics in Comparative Politics (3). An intensive examination of a topic in comparative politics. Subject matter varies according to the instructor. Topic to be announced in advance.

CPO 5036 Politics of Development (3). This course examines divergent explanations for development and underdevelopment. Of central importance are the concepts and theories which emphasize the political dimensions of development, including theory and concept, processes of development, and actors in the development process.

CPO 5091 Seminar in Comparative Politics (3). A foundation in the development of the field of comparative politics and in the major schools of thought that have molded the perspectives on comparative political analysis.

CPO 5325 Politics of the Caribbean (3). Examines the structural and institutional aspects of the politics of the Caribbean in both domestic and international contexts. Prerequisite: Graduate standing.

CPO 5934 Topics in Comparative Politics (3). A rigorous examination of a topic in comparative politics. Subject matter varies according to instructor. Topic will be announced in advance.

CPO 5936 Seminar in Comparative Political Parties (3). Students read and discuss major works on parties by conservative, liberal, and marxist authors.

INR 2002 Dynamics of World Politics (3). An examination of the political forces which shape the actors, institutions, and processes of world politics. Special attention is given to the role of transnational forces.

INR 3102 American Foreign Policy (IP) (3). An examination of the legal, administrative, and political structure by which American foreign policies are formulated and implemented. Includes a discussion of the objectives and consequences of United States foreign policy in selected regional, social-economic, and ideological areas. Enables the student to understand the procedures by which foreign policy is made and implemented in the United States.

INR 3203 World Politics (IP) (3). Overview of competing theories and methods used in the study of world politics. Accompanying focus on the changing world system in the post cold war era.

INR 4084 Ethnicity in World Politics (3). This course examines the political dimensions of ethnic conflict from a comparative perspective. It evaluates the dynamics of ethnic conflict in Western Europe, Africa, Latin America, and the United States, through a series of case studies.

INR 4204 Comparative Foreign Policy (3). This course is an analysis of the development of the foreign policy-making process in the United States, Britain, France, West Germany, and Italy. Particular attention is directed to the domestic and international factors which affect the making of foreign policy.

INR 4244 Latin America in World Politics (3). This course will be primarily concerned with Latin America's role in the world political system. Of special interest will be the impact of the North-South split on Latin America, and in particular Latin America's relationship to the United States. Key issues of international politics concerning Latin America, including the Panama Canal, will be selected for study.

INR 4350 International Environmental Politics (3). Addresses environmental politics from an international perspective. Ecological problems and issues are becoming international, environmental problems are crossing national borders, and public attitudes Prerequisites: Introduction to International Relations and Introduction to Environmental Science (recommended).

INR 4407 Political Foundations of International Law (3). An examination of the interaction between politics and international law, with particular emphasis on such interaction during the present century. The role of international institutions in the modifying of existing international law concepts and the developing of such concepts is also examined.

INR 4501 Multinational Organizations (3). The course examines contemporary international politics through an analysis of inter-governmental and non-governmental actors. It emphasizes the prominent role played by increasing levels of transnational relations, inter-dependence, and global dominance in world politics.

INR 4521 Politics of Regional Integration (3). Examines regional economic blocs - European Union, NAFTA and Pacific rim. Forces influencing regional integration and effects on global trade are studied.

INR 4702 Politics of World Economy (3). The politics of world economy with emphasis on the role played by transnational political/economic institutions.

INR 4926 Model United Nations (3). Students participate in a UN simulation. Attention is given to the workings of the UN, negotiating skills, and critical international issues. Prerequisite: Permission of the instructor.

INR 4933 Topics in International Politics (3). An intensive examination of a topic in international politics. Subject matter varies according to the instructor. Topic to be announced in advance.

INR 5007 Seminar in International Politics (3). An advanced graduate course designed to give students a specialized knowledge of the classics in international politics. The course traces the development of international politics from Thucydides to the present.

INR 5087 Ethnicity and the Politics of Development (3). This course examines the conceptual and substantive dimensions of ethnicity in the context of world politics and political development. The course will highlight ethnicity and ethnic groups as critical factors in North-South politics.

INR 5105 American Foreign Policy (3). Compares different perspectives in foreign policy analysis. Provides a comprehensive understanding of major issues in U.S. policy.

INR 5414 Topics in International Law (3). An intensive examination of the political dimensions of international law in the context of rapidly changing global political relations.

INR 5934 Topics in International Politics (3). A rigorous examination in international politics. Subject matter varies according to instructor. Topic to be announced.

POS 2042 American Government (3). Power distribution and policy-making in U.S. Topics include political change; role of majorities; minorities; media, elections in U.S. politics; national institutions; and Florida state and local government.

POS 3073 The Military and the Citizen (3). Examines the U.S. military as a basic governmental institution, its relationship to civilians/citizens, and its post World War II history.

POS 3152 Urban Politics (AP) (3). An examination of the processes by which social conflicts in American urban areas are represented and regulated. Emphasis is placed on how urban problems are identified; and the way proposed solutions are formulated, legitimatized, and administered by urban policy-making processes. Includes a discussion of urban political culture. Enables the student to understand major problems confronting communities in urban areas.

POS 3283 The Judicial Process (JP) (3). An introduction to the study of public law. Examines the relationship between politics and judicial structure and process. Emphasizes the judicial system as a particular kind of policy-making system, and evaluates its strengths and weaknesses from a policy-making perspective.

POS 3413 The Presidency (AP) (3). An examination of the various interpretations of the Presidency. Attention is directed to the role of the President in a technocratic society. Enables the student to understand one of the most visible political institutions.

POS 3424 The Legislative Process (AP) (3). Examines the context and process of legislative decision-making, including the impact of elections, groups, bureaucracies, and the norms of legislative behavior. Evaluates legislatures in light of various theories of representation and conflict-management.

POS 3443 Political Parties (AP) (3). Studies the internal structure, political functions, and behavior of modern political parties. Attention is given to the relationships between political parties and various economic, ethnic, and regional interest. Enables the student to understand the problems of expressing and structuring political demands to facilitate or obstruct governmental decision making.

POS 3603 Constitutional Law: Powers (JP) (3). An examination of the basic principles of American government, as defined through constitutional law. Focus will be on the nature of the union, federalism, national government powers, separation of powers, state government powers, and powers of the respective branches of government.

POS 3604 Constitutional Law: Limitations (JP) (3). An examination of the limitations on government as defined by the Supreme Court through constitutional law. Focus will be on the limitations of government with respect to the rights of the individual, of groups, and of the states. Particular attention will be paid to civil rights, civil liberties, the rights of the accused, political rights, and economic liberties.

POS 3703 Methods of Political Analysis (3). An introduction to the principal concepts and techniques of data collection and organization in political science. Includes practical exercise in data collection and organization. Highly recommended for those planning graduate study.

POS 3949 Cooperative Education in Political Science (3). A student majoring in Political Science may spend several semesters fully employed in industry or government in a capacity relating to the major.

POS 4034 Political Change in America (3). Analysis of theories of political change in america and their application to major political movements from the 1960's to the present.

POS 4071 Corporate Power and American Politics (3). An examination of the formal and informal linkages between the private and public sectors and the sets of relationships which govern each. Particular attention is devoted to the exploration of the political role of business and the close but uneasy relationship between private enterprise and democracy.

POS 4074 Latino Politics (3). Presents an overview of the role of Hispanics in the U.S. political system. It explores the historical and socio-economic dimensions of Latino politics.

POS 4122 State Government and Politics (3). A study of the political processes, structure, and development of state systems. This course attempts to provide the student with an understanding of the basic structure of state government and political processes.

POS 4152 Conflict and Change in American Cities (3). A study of social conflict in American cities. Emphasis is on how urban problems are identified and proposed solutions are formulated, legitimized and administered by policy-making processes.

POS 4154 Topics in Urban Politics and Policy (3). An intensive examination of a topic in urban politics and policy. Subject matter varies according to instructor. Topic will be announced in advance.

POS 4173 Politics in the American South (3). An examination of the politics of the American South with particular attention to the role of political parties, the Civil Rights movement, and the impact of Reconstruction.

POS 4188 Miami Politics (3). Examines the politics of Miami-Dade County. Topics include functioning of Metro government, theories of politcal power, politics of ethnicity and class, growth politics, and political corruption.

POS 4205 American Political Culture (3). Examines American political culture and the forces that share it. Specific focus on competing theories, and the role of political socialization, ideology, the economy, media, and schooling.

POS 4233 Public Opinion and Electoral Behavior (3). An examination of the social and psychological factors shaping public opinion and voting choice. Particular attention will be directed to the nature of trends and patterns in electoral results and systemic elements influencing such patterns.

POS 4284 Judicial Behavior (3). An examination of various approaches, theories, and findings on the behavior of judicial actors, particularly as it relates to judicial decision-making. The focus of the course will be on judges, lawyers, prosecutors, and other relevant actors in the judicial process.

POS 4314 American Ethnic Politics (3). This course examines American ethnic politics from conceptual and substantive perspectives. Special attention is devoted to the theoretical dynamics of ethnicity as well as an intensive investigation of Irish, Italian, Jewish, and Black ethnic politics.

POS 4463 Interest Group Politics (3). An examination of the various types of voluntary associations which seek to influence the political process. Special attention is given to the role of private power in a pluralist system. Enables the student to understand the ambivalent American attitude towards pressure groups and lobbying activities in the legislative and administrative arenas.

POS 4493 Politics of Judicial Administration (3). This course is designed to examine the process of judicial administration, particularly from the political perspective. The politics of selecting judicial personnel, financing, budgeting, disposition of litigation, reorganization, and intergovernmental relations will be included. (JP)

POS 4605 Gender Justice (3). The development of gender law in the U.S. and legal strategies by which courts both initiate and respond to demands for social change. Emphasis on various legal definitions of justice and equality.

POS 4627 Equality and the Constitution (3). An examination of the Supreme Court's interpretations of the Constitution in relation to social and political equality. Questions of equal justice pertaining to race, alienage, gender, sexual orientation, political representation, and economic status are explored.

POS 4713 The Logic of Data Analysis in Political Science (3). An introduction to the major concepts employed in the analysis of political data. Emphasis is on the logic of explanation rather than the techniques of such explanation. This is not a course in statistical method. Highly recommended for those planning graduate study.

POS 4905 Independent Study (3). Designed for advanced students who wish to pursue specialized topics in political science. Arrangements must be made with instructor during the prior semester.

POS 4930 Topics in Public Law (3). An intensive examination of a topic dealing with public law. Subject matter varies according to instructor. Topic will be announced in advance.

POS 4931 Topics in Politics (3). An intensive examination of a topic in politics. Subject matter varies according to instructor. Topic will be announced in advance.

POS 4935 Honors Seminar (3). A rigorous examination of a political topic designed for advanced political science majors. Subject matter varies according to instructor. Topic to be announced in advance.

POS 4941 Legislative Internship (1-20). An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between the student and advisor.

POS 4944 Judicial Internship (1-20). An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between the student and advisor.

POS 4949 Cooperative Education in Political Science (3). A student majoring in Political Science may spend one or two semesters fully employed in industry or government in a capacity relating to the major.

POS 5045 Seminar in American Politics (3). The advanced study of U.S. politics. Students read and discuss the major works and theories concerning American politics and government.

POS 5146 Seminar in Urban Politics (3). Examination of processes by which urban areas are governed. Emphasis is on conflicts over structures, power, policy and the politics of ethnicity and class.

POS 5158 Topics in Politics (3). Subject matter varies according to instructor.

POS 5208 Seminar in Political Behavior (3). Analyzes the literature in political behavior. Special emphasis is on voting, socialization, attitudes, partisanship, campaigning, the media, and political participation in the developed democracies. Prerequisite: Seminar in Political Science Methodology.

POS 5326 Seminar in Class Analysis (3). The theoretical and empirical issues associated with class divisions in contemporary societies. Theoretical debates regarding definitional problems of class identity and empirical case studies highlighting class conflict and stratification.

POS 5447 Seminar in U.S. Political Parties (3). Students read and discuss the major works and theories on U.S. Political Parties.

POS 5638 Topics in Public Law (3). A rigorous examination of a topic in public law. Subject matter varies according to instructor. Topic will be announced in advance.

POS 5702 Teaching Political Science (1). Introduces graduate students to the pedagogical and practical aspects of teaching political science. Topics will include selecting books, writing a syllabus, lecturing, running discussion groups, and testing and grading. Covers professional ethics, and student rights and responsibilities.

POS 5706 Methodology (3). This course is an introduction to the principal concepts and techniques of quantitative and non-quantitative methodology in the Social Sciences. It is designed to familiarize the student with the language and format of quantitative and non-quantitative applications in order to permit students to deal effectively with the literature of their field.

POS 5716 Foundations of Political Science (3). Prepares students for the advanced study of politics. Areas of

study include history of Political Science as a discipline, comparison of classical and modern sciences of politics and realpolitik, epistemological foundations.

POS 5909 Independent Study (3). Designed for advanced students who wish to pursue specialized topics in political science. Arrangements must be made with instructor during prior semester.

POS 5932 Topics in Urban Politics (3). An extensive examination of the processes by which social conflicts in American urban areas are represented and regulated. Emphasis is on the ways in which urban problems are identified and proposed solutions formulated, legitimatized, and administered by urban policy-making processes, includes a discussion of urban political culture. Enables the student to understand the major problems confronting communities in urban areas.

POT 2002 Introduction to Political Theory (3). Introduction to various ways of thinking about the political. Includes an examination of explanations offered for political phenomena and an analysis of political prescriptions. Special attention given to assumptions underlying political beliefs.

POT 3013 Ancient and Medieval Political Theory (PT) (3). A study of the major political philosophers of the ancient and medieval periods. Primary emphasis is given to the Greek experience. The nature of political theory as a tradition of discourse is examined.

POT 3054 Modern Political Theory (PT) (3). An analysis of the thought of the great political thinkers since Machiavelli, culminating with the nineteenth century theorists. Basic themes and ideas common to all these political theorists will be discussed in detail. The problem of 'modernity' will receive special attention.

POT 3064 Contemporary Political Theory (PT) (3). An overview of the major conceptual frameworks used by political theorists to describe, explain, and evaluate political behavior and processes. Stress is placed on political theory, not only as a basis for inquiry, but also as a base for political action. This course enables the student to develop analytical abilities with which to interpret the political events of his or her time.

POT 3204 American Political Thought (PT) (3). An examination of American political thought from its 17th century origins to the contemporary period. The continuities and discontinuities in the development of American political ideas since colonial times will receive special attention.

POT 3302 Political Ideologies (PT) (3). An analysis of modern political ideologies since the French Revolution, including liberalism, conservatism, and socialism. Particular emphasis will be given to Marxism. The contemporary link between ideology and totalitarianism will be examined.

POT 3621 Theories of Justice (3). An analysis of major theories of justice from Plato to the present. Emphasis on the implications of theory for U.S. constitutional law, the role of judges, and the nature of the good society.

POT 4309 Sex, Power and Politics (3). Theories are examined that explain differences between women's and men's power in the political arena. Their internal consistency and "fit" with reality are also explored.

POT 4344 Class, Race and Sports (3). Examines the political structure of organized sports with a concentration on issues of class and race. Theories explore the relationship between owners, players and fans in modern sports.

POT 4930 Topics in Political Theory (3). An intensive examination of a topic in political theory. Subject matter varies according to instructor. Topic will be announced in advance.

POT 5007 Seminar in Political Theory (3). An examination of writings from a diverse list of some of the major political theorists in the western tradition from antiquity to the present.

POT 5307 Feminist Political Theory (3). Examines feminist political theory in the second half of the twentieth century with the focus on the work of U.S. scholars.

POT 5934 Topics in Political Theory (3). An intensive examination of selected topics dealing with political theory. Subjects will vary, depending upon the desires of students and faculty. Allows the student to choose topics of particular interest to him or her.

PUP 4004 Public Policy: U.S. (3). An intensive examination of the theory and practice of formulating, legitimatizing, administering, and evaluating public policy. Includes a discussion of the role of administrators, legislators, courts, interest groups and political parties in their processes. Gives the student an analytical basis for understanding and participating in the making of public policy in a variety of policy areas. Prerequisite: Prior work in American institutions: The Congress, Presidency, or Judicial.

PUP 4203 Environmental Politics (3). Examines US environmental politics in terms of political institutions.

PUP 4323 Women in Politics (3). Examines the role of women in the political system as they act within, and are affected by, politics. Special attention to current and enduring political issues which particularly affect women.

PUP 4931 Topics in Public Policy (3). An examination of a topic in public policy. Subject matter varies according to instructor. Topic to be announced in advance.

PUP 5934 Topics in Public Policy (3). A rigorous examination of a topic in public policy. Subject matter varies according to instructor. Topic will be announced in advance.

URP 4149 Planning and Human Ecology (3). Environmental planning and design utilizing a human ecology perspective. Examines issues of open space planning, urban design, neighborhood planning, and citizen participation.

Psychology

Scott Fraser, *Associate Professor and Chairperson*
Lorraine Bahrick, *Professor*
Margaret Bull-Kovera, *Assistant Professor*
Brian Cutler, *Professor*
Marvin Dunn, *Associate Professor*
Joan Erber, *Professor*
Luis Escovar, *Associate Professor*
Gordon Finley, *Professor*
Ronald Fisher, *Professor*
Arthur Flexser, *Associate Professor*
Leslie Frazier, *Assistant Professor*
Jacob Gewirtz, *Professor*
Fernando Gonzalez-Reigosa, *Associate Professor*
William Kurtines, *Professor*
Mary Levitt, *Associate Professor*
Michael Markham, *Assistant Professor*
Michelle Marks, *Assistant Professor*
Marilyn Montgomery, *Assistant Professor*
Gary Moran, *Professor*
Janat Parker, *Professor*
James Rotton, *Associate Professor*
Randy Salekin, *Assistant Professor*
Juan Sanchez, *Associate Professor*
Bennett Schwartz, *Associate Professor*
Wendy Silverman, *Professor*
Jonathan Tubman, *Associate Professor*
Chockalingam Viswesvaran, *Associate Professor*

Bachelor of Arts

Degree Program Hours: 120

Lower Division Preparation

Common Prerequisites

BSC 2023	Human Biology
PSY 2020	Introduction to Psychology
DEP 2000	Human Growth and Development
	or
DEP 2001	Psychology of Infancy and Childhood
	or
INP 2002	Introductory Industrial/Organizational Psychology
	or
SOP 2772	Psychology of Sexual Behavior
STA 2122	Introduction to Statistics I

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program

The Psychology major requires 36 hours of upper division psychology course work, including STA 3123. All courses must be taken for a letter grade. A 'C' or better is required for all courses that count toward the major.

The program has the following three major psychology components and a fourth, general, component for graduation:

I. Specific Required Courses in the Following Sequence: (12)

A. Statistics (offered by the Department of Statistics):

STA 3123	Introduction to Statistics II	4

Note: COP 2210 is recommended for students planning to enter graduate school.

B: PSY 3213 Research Methods in Psychology *(Prerequisites: STA 3123)* 3

C. Advanced laboratory or field experience *(Prerequisites: STA 3123 and PSY 3213)* 5

Note: Because the three courses in this component of the program must be taken in sequence, the first course (STA 3123) should be taken no later than the first semester of the junior year.

II. Distribution Requirement Courses: (15 semester hours)

To fulfill this required component, each student must take one course or a laboratory/field experience from each of the five areas (A-E) listed below.

Lecture Courses		Laboratory/Field Experiences
Area A: Experimental		
EXP 3523	EAB 3002	EXP 4404C
EXP 4204	PSB 4003	EXP 4005
EXP 4605	EXP 4214	EAB 4034
Area B: Social		
SOP 3004	SOP 4645	SOP 4215
SOP 4522	SOP 4714	SOP 4842
SOP 4525	SOP 4649	SOP 4414
SOP 4834		
Area C: Applied		
CYP 3003	INP 4203	CYP 4953
SOP 4712	PPE 4604	INP 4055L
SOP 4331	SOP 4331L	
Area D: Personality/Abnormal		
CLP 3003	CLP 4374	PPE 4325C
CLP 4144	DEP 4213	EAB 3765
EXP 3304	PPE 3304	
Area E: Developmental		
DEP 3402	DEP 3115	PSY 4932L
DEP 4164	DEP 3303	DEP 4707L
DEP 4014	DEP 4464	SOP 3015

III. Required Psychology Course Electives: (9)

Any psychology course taken for a letter grade can be used to fulfill the requirement for electives.

Note: In some cases a student may fulfill a distribution area requirement with a laboratory course and may not therefore take a lecture course in that area. In such a case, the student must take four (12 hours) elective courses so that the total number of upper division hours for the psychology major reaches the required number of 35 credit hours.

IV. Electives to Complete the requirement of 60 credit hours: (24)

A student may, but is not required to, take additional upper division psychology courses beyond the required 36 hours towards the fulfillment of the 60 upper division credit hours needed for graduation. Students may, with the permission of the instructor, take PSY 4900 and PSY 4916, which are given Pass/Fail grades. These courses can therefore not count in the category of Required Psychology Electives, but they can be used as additional credit towards graduation. There is a College requirement that at least nine hours of elective credit (not including STA 3123) must be outside of Psychology.

Remarks: (1) The student is strongly urged to contact the Psychology Department for advisement in curriculum planning; (2) Psychology majors are allowed to transfer a maximum of ten upper division semester credit hours toward the psychology degree.

Bachelor's Degree with Honors

Application must be made and departmental approval granted, to undertake an independent project which must be approved by and carried out under the supervision of a member of the Department. Upon completion of the study, a satisfactory oral defense of the work must be presented to a Department committee.

Note: The Bachelor's degree offered in this program is a liberal arts degree and not a professional degree. While it is possible to concentrate courses in one's area of interest, it is not possible at the present time to obtain a 'professional specialization' at the undergraduate level in psychology.

Minor in Psychology

A Minor in Psychology requires 15 upper division semester hours of approved psychology credits. Students seeking the minor must meet with a

psychology faculty member for advisement and should file with the Psychology Department a written notice of intention to minor in psychology. A grade of 'C' or higher is required in all courses counted toward the minor.

Course Descriptions

Definition of Prefixes

CLP-Clinical Psychology; CYP-Community Psychology; DEP-Developmental Psychology; EAB-Experi- mental Analysis of Behavior; EDP-Educational Psychology; EXP-Experimental Psychology; INP-Industrial and Applied Psychology; LIN- Linguistics; PCO-Psychology for Counseling; PPE-Psychology of Personality; PSB-Psychobiology; PSY-Psychology; SOC-Sociology; SOP-Social Psychology; SPA-Speech Pathology and Audiology

CLP 3003 Personal Adjustment (3). Study of personal adjustment in the social and occupational life of the individual. Emphasis on interpersonal aspects of effective behavior.

CLP 4144 Abnormal Psychology (3). Various forms of behavior pathology are examined in the light of traditional and current concepts of mental health and illness. Problems of diagnosis and treatment are discussed. The role of social mores is examined.

CLP 4374 Psychotherapy (3). Current approaches to the treatment and improvement of psychological disorders are critically surveyed. Emphasis is placed on the examination of the various techniques of psychoherapy and behavior therapy. Broader strategies of prevention and mental health promotion, like consultation, counseling, and programmed agency services, are also studied.

CLP 4444 Personality Disorders (3). Studies personality disorders according to current concepts of mental health and illness. Emphasis given to current theoretical and diagnostic categories. Prerequisite: CLP 4144.

CLP 5166 Advanced Abnormal Psychology (3). Advanced study of the causes, psychopathology manifestations, and social and personal consequences of behavior disturbance. Emphasis is placed on the critical examination of current research on the biological, psychological, and social aspects of these disorders. Clinical approaches to diagnosis, course, and prognosis in the contemporary mental health context (including 'practicum' assignments if feasible) are covered.

CLP 5169 Proseminar in Developmental Psychopathology (3). A comprehensive review of topics in developmental psychopathology including history, scope, methods, individual and contextual influences, developmental course, long-term outcomes, and resilience. Prerequisites: Graduate standing or permission of the instructor.

CLP 5175 Personality Dynamics (3). A review of different approaches to the study of personality. Prerequisites: Successful completion of a course in theories of personality, or equivalent. Permission of the instructor.

CLP 5185 Current Issues in Mental Health (3). A critical, intensive examination of selected, important issues in mental health. Emphasis is given to the empirical study of contemporary problems related to the making of mental patients; planning, programming, and administering mental health services; political, ethical, and legal constraints on the operation of mental health facilities; interdisciplinary cooperation among helping and human service professionals; and evaluation of preventive care and treatment services. Prerequisite: Abnormal Psychology or permission of the instructor.

CLP 5931 Ethical Code in Psychological Practice (3). Ethical principles, rules, procedures of Psychologists. Clinical appliation and incorporation of the principles into professional interactions. Ethical reasoning is emphasized.

CYP 3003 Introduction to Community Psychology (3). An introduction to the issues and scope of Community Psychology. Students will be exposed to the development of Community Psychology as a growing discipline. Particular emphasis will be placed on the role of the community psychologist as an agent of social change.

CYP 4953 Community Psychology Field Experiences I (5). Students will be organized into task-oriented teams or will work independently in the community, for the purpose of becoming familiar with various community institutions and developing an action plan for assisting institutions in implementing change. Prerequisite: PSY 3213 or STA 3123.(Lab fees assessed)

CYP 5534 Groups as Agents of Change (3). Theory and practice in utilizing groups as agents of change or development in communities and organizations. Didactic presentation and structured exercises focus on relevant issues. Students design and implement problem-focused interventions, using class as client system.

CYP 5954 Community Psychology Field Experiences II (5). Same orientation and description as Field Experience I. Students in this course will be able to pursue their work with community institutions in more depth. Prerequisite: Students enrolled in this course must have completed Community Psychology Field Experiences I.

DEP 2000 Human Growth and Development: Introductory Developmental Psychology (3). An introductory study of the development of personality, intelligence, and motivation, from childhood to adulthood. Emphasis is on development of cognitive systems through social learning. The full life span of human growth and development will be considered. Prerequisites: PSY 2020 or equivalent.

DEP 2001 Psychology of Infancy and Childhood (3). An introduction to human development focusing on infancy and childhood. Particular attention will be devoted to intellectual, personality, and social development. Consideration will be given to both theoretical and empirical perspectives.

DEP 3115 Development in Infancy: The Basis of Human Knowledge (3). Provides a comprehensive review of current methods, theories, and findings in cognitive and perceptual development in the first year of life. Special emphasis on the bases of knowledge; object and event perception, memory, and imitation. Prerequisites: PSY 2020 and one developmental course, any level recommended.

DEP 3303 Psychology of Adolescence (3). An examination of psychological, sociological and biological factors contributing to the changes from childhood to adolescence, and biological factors contributing to the changes from childhood to adolescence, and from adolescence to young adulthood.

DEP 3404 Psychology of Adulthood (3). The transition from youth to middle age is studied. Focus is on changing roles in family, work, and societal settings, as these factors

influence personality and other aspects of psychological function.

DEP 4014 Psychology of Parenting & Parenthood (3). An intensive examination of the reciprocal influences of parents on the development of their children and of children on the adult development of their mothers and fathers.

DEP 4032 Life-Span Cognitive Development (3). Course covers all facets of cognitive growth, change, and decline from infancy through adulthood, and old age. Prerequisite: DEP 2000, DEP 2001, DEP 4164, or DEP 4464.

DEP 4044 Psychology of Moral Development (3). A review of psychological theories and research concerning the development of moral attitudes and behavior.

DEP 4046 Psychology of Adoption (3). An advanced undergraduate seminar involving intensive reading and discussion of the research literature on adoptive families, adoptive parenting, and adoptee outcome. Prerequisite: Senior standing.

DEP 4164 Children's Learning (3). Learning in infancy and childhood, with particular emphasis on simple conditioning, discrimination shifts, mediation, transposition, observational, and concept learning. Prerequisite: Students enrolling in this course should have completed successfully at least one prior course in developmental psychology.

DEP 4182 Socio-emotional Development (3). A survey of facts and theories of human social emotional development and social learning in the early years of life. Prerequisite: DEP 2000 or DEP 2001.

DEP 4213 Childhood Psychopathology (3). Various forms of abnormal behavior in infancy, childhood, and adolescence are examined within the context of traditional and contemporary psychological theory. Problems of differential diagnosis and forms of remediation are discussed.

DEP 4321 Development of Sexual Identity: A Life Span Approach (3). Reviews developmental and clinical theory and research on sexual identity across the life span, emphasizing the influence of personal change, close relationships, and community factors. Prerequisite: PSY 2020.

DEP 4324 Psychology of Identity Development (3). An introduction to psychological theory, research, and application in the area of identity development.

DEP 4407 Current Issues in Aging (3). A focus on current issues having both theoretical and applied relevance to the psychology of older adulthood. Students are required to make several field trips outside of class during the semester.

DEP 4464 Psychology of Aging (3). An examination of the factors that contribute to the psychological profile characterizing old age. Biological and sociological components are considered, and their impact on perceptual, cognitive, and personality processes is analyzed.

DEP 4704 Developmental Psychology: Lecture (2) DEP 4704L Developmental Psychology Laboratory (3). Lecture/Laboratory observation exercises illustrative of the concepts and research techniques used in developmental psychology. Particular emphasis is given to cognitive and social-cognitive development. This course is for seniors who have completed PSY 3213, one developmental psychology course, and STA 3123. (Lab fees assessed)

DEP 5056 Issues in Life-Span Developmental Psychology: Infancy through Old Age (3). A survey in depth of theories, issues, methods, and data in life-span developmental psychology through the entire age range. Prerequisites: DEP 2001 or DEP 4464, or their equivalents, are recommended.

DEP 5058 Biological Basis of Behavior Development (3). Introduction to theory and research underlying behavioral development. Covers such pre-and post-natal determinants as evolution, genetics, neuroendocrines, as well as social development, behavioral ecology, and sociobiology. Prerequisite: Graduate standing or permission of the instructor. Corequisite: Proseminar courses.

DEP 5068 Applied Life Span Developmental Psychology (3). This course is designed to acquaint the student with various applications in life-span developmental psychology. An overview of general issues and areas of application is offered, and specific applications are considered. Prerequisite: Graduate standing or permission of the instructor.

DEP 5099 Proseminar in Infancy, Childhood, and adolescence (3). Provides a comprehensive review of issues in perceptual, cognitive, social, emotional, and personality development from infancy through adolescence. Prerequisite: Graduate standing or permission of the instructor. Corequisite: Pro-seminars.

DEP 5118 Current Issues in Cognitive and Perceptual Development in Infancy (3). Provides an in-depth analysis of current issues, methods, research and theory of cognitive and perceptual development during the first year of life. Special emphasis on object and event perception, memory, and imitation. Prerequisites: Two courses in developmental psychology - any level recommended.

DEP 5185 Emotional Learning & Its Reversal (3). Theoretical analyses and methodological issues in the study of emotional learning. Prerequisites: Graduate standing or permission of the instructor.

DEP 5315 Proseminar in Parent-Child Relations (3). Provides an overview of key issues in parent-child relations including culture, socialization/genetics, fatherhood, timing, adoption, work, effects of children on parents, and parent training. Prerequisite: Graduate standing or permission of the instructor.

DEP 5344 Psychology of Moral Development (3) An introduction to the literature on moral development. Review and discussion of recent developments in this area. Prerequisites: Graduate standing or Permission of the instructor.

DEP 5405 Proseminar in Psychology of Adulthood and Aging (3). A comprehensive review of topics in adulthood and aging including: biological changes, social processes, work, family, cognition, memory, personality, and psychopathology. Prerequisite: Graduate standing or permission of the instructor.

DEP 5608 Theoretical Perspectives in Developmental Psychology (3). The focus of this course is on the major paradigms, models, and theories that have been influential in developmental psychology, both historically and contemporaneously. Meta-theoretical issues, paradigmatic influences, and specific theories are considered. Prerequisite: Graduate standing or permission of the instructor.

DEP 5725 Research Seminar in Psychosocial Development (1). This course is designed to develop research skills and competencies in the area of psychosocial development. The emphasis of the course is on involvement in original research. Prerequisite: Permission of the instructor. Corequisite: Senior undergraduate or graduate standing.

DEP 5796 Methods of Developmental Research (3). Survey of issues and methods at all stages of life-span developmental research including theory, methods, design, and data reduction. Prerequisite: Graduate standing or permission of the instructor. Corequisite: proseminars.

EAB 3002 Introduction to the Experimental Analysis of Behavior (3). An introduction to and survey of the principles, methods, theories, and applications of the experimental analysis of behavior. PSY 2020 or PSY 2012.

EAB 3765 The Application of Behavior Analysis to Child Behavior Problems (3). The applications of the theories and methods of behavior analysis to various childhood behavior disorders including anxiety and phobia, attention deficit disorders, autism and obesity. Prerequisite: EAB 3002.

EAB 4034 Advanced Behavior Analysis (2). EAB 4034L Advanced Behavior Analysis Lab (3). Strategies and tactics in the scientific approach to behavioral research, both basic and applied. Both lecture and laboratory sessions are involved. Prerequisite: EAB 3002 or equivalent. Corequisite: EAB 4034L.

EAB 4794 Principles and Theories of Behavior Modification (3). Studies different approaches to the modification of problem behavior, through the application of learning principles and theories. Prerequisite: EAB 3002.

EAB 4797 Single Case Research Methods (3). Intensive study of designs, strategies, and methods of single-case behavioral research. Prerequisite: EAB 3002.

EAB 5098 Proseminar in the Experimental Analysis of Behavior (3). An advanced survey of the principles of respondent and operant conditioning and the bases of action in both social and non-social settings. Prerequisites: EAB 3002, EAB, 4034, or equivalents.

EAB 5655 Advanced Methods of Behavior Change (3). An intensive study of selected methods of modifying human behavior, emphasizing the applications of the principles of respondent and operant conditioning, as well as those derived from modern social learning theories. Practice and role playing opportunities are provided in behavior therapy, relaxation therapy, behavior modification, biofeedback or similar behavioral approaches. Prerequisites: EAB 4794, CLP 4374, CYP 4144; enrollment in an authorized program; equivalent background; or permission of the instructor.

EAB 5797 Single-Case Research Methods (3). Intensive study of designs, strategies, and methods of single-case behavioral research. Prerequisites: Graduate standing or permission of the instructor.

EXP 3304 Motivation and Emotion (3). Introduces several perspectives from learning theory, perception, and personality theory to explore ways in which people move through their physical and social environment.

EXP 3523 Memory and Memory Improvement (3). This introduction to human memory considers the topics from a number of points of view. The following issues are addressed: the nature of memory and its phenomena; the capabilities and limitations of an ordinary and an extraordinary memory; and the skills that can aid an ordinary memory.

EXP 4005 Advanced Experimental Psychology (2) EXP 4005L Advanced Experimental Psychology Lab (3). Lecture and laboratory course investigating experimental research in the fundamental processes of human behavior. Includes perceptual, cognitive, and linguistic processes. Prerequisites: PSY 3213 and STA 3123.(Lab fees assessed)

EXP 4204 Sensation and Perception (3). Basic concepts in sensation and perception are explored, with an emphasis on models of peripheral and central neural processing. Topics such as receptor function, brightness and color vision, movement and object perception, perceptual memory and pattern recognition are considered. Psychophysical techniques, such as subjective magnitude estimation and signal detection theory, are covered. (Lab fees assessed)

EXP 4214C Human Perception: Lecture (2) and Laboratory (3). Lectures concern the methods researchers use to learn about the phenomena of sensation and perception. Laboratory exercises allow students to apply these methods and to experience the perceptual phenomena under investigation. Prerequisites: PSY 3213 and STA 3123.

EXP 4404C Human Learning and Remembering: Lecture (2) and Laboratory (3) (5). Lectures on the research and theoretical contributions to the understanding of human learning and remembering; and laboratory exercises illustrative of the concepts and techniques used in conducting experimental studies of human learning and remembering. Prerequisites: PSY 3213 and STA 3123. (Lab fees assessed)

EXP 4605 Cognitive Processes (3). Investigation of the mental processing underlying experiences and behavior. Topics include: games, puzzles, and problems; intuitive and creative thought; conceptualization, reasoning and clinical diagnosis; choices and decisions; conceptions of time and space; and thought in abnormal or altered states of consciousness.

EXP 4934 Current Experimental Theories (3). The stress in this course is on current specific theories determining the nature and direction of the research and interest in several important areas, such as psychophysics, learning and remembering, developmental patterns and motivation, personality, etc. Topics to be covered will be announced at the beginning of the academic year. May be taken twice for credit toward the major.

EXP 5099 Proseminar in Experimental Psychology (3). Provides a comprehensive review of current research and theory in areas such as learning, memory, cognition, sensation, and perception. Prerequisite: Graduate standing or permission of the instructor.

EXP 5406 Theories of Learning (3). The major theoretical systems of learning are covered, with the intent of determining how well each accounts for the phenomena of learning. Emphasis is placed on exploring the controversial issues raised by extant theories, and the experimental resolution of these theoretical controversies. The impact of theory on

current thinking about learning is considered.

EXP 5508 Applied Cognitive Psychology (3). Covers the basic theories of cognitive psychology perception, attention, memory, learning, knowledge, with emphasis on application to real-world problems. Prerequisite: Graduate Standing.

EXP 5524 Cognitive Neuroscience (3). Investigation of the relation between mind and brain. Discuss literature from both patient studies and from the growing research in neuroimaging. Prerequisite: Graduate standing.

EXP 5527 Memory and Consciousness (3). The relation of memory and consciousness is explored with emphasis on issues of current research and theoretical work from both a cognitive and a neuropsychological perspective. Prerequisite: Graduate standing.

INP 2002 Introductory Industrial/Organizational Psychology (3). Introduction to the study of behavior in the work environment. Illustrative topics included formal and informal organization, work motivation, satisfaction and performance, leadership, job analysis, selection and performance evaluation, training, and development.

INP 4055C Industrial/Organizational Psychology Lecture (2) INP 4055L Industrial/Organizational Psychology Laboratory (3). Students gain experience with the use of psychometric instruments in the areas of job analysis, personnel selection, performance appraisal, job satisfaction, criteria analysis, and management training and development. Prerequisites: PSY 3213; STA 3123; and INP 2002 or INP 4203, or Personnel Management.(Lab fees assessed)

INP 4203 Personnel Psychology (3). Techniques and procedures applicable to the selection, placement, utilization, and evaluation of personnel in organizations are considered. The emphasis will be on empirical procedures, rather than the management function in the personnel area. Topics such as quantitative methods and models for selection, criteria analysis, performance appraisal, management training, and job satisfaction are discussed. Prior course in statistics strongly recommended.

INP 5095 Proseminar in Industrial Psychology (3). Provides coverage of industrial and personnel psychology topics such as job analysis, personnel recruitment and selection, legal aspects of employment, performance appraisal, and training design and evaluation. Prerequisites: Acceptance to Master's or Ph.D. program in Psychology.

INP 6611 Organizational Stress (3). This seminar examines conceptualizations, causes, consequences, and correlates, of stress, strain, and coping in the workshop. Prerequisite: Graduate standing.

LIN 4705 Psychology of Language and Cognition (3). Investigation of the psychological processes underlying language. Attention will be devoted to speech perception, comprehension, written langauge, and the biological basis of language abilities. Prerequisite: PSY 2020.

LIN 4710 Language Acquisition (3). An examination of the way children acquire language, based on experimental findings from contemporary linguistics, psycholinguistics, and behavioral theory.

LIN 5701 Psychology of Language (3). An overview of the psychology of language and the psychological 'reality' of linguistic structure. Behavioristic vs. cognitive views of psycholinguistics are examined. Consideration is given to the biological bases of language and thought, language acquisition, and language pathology.

PPE 3003 Theories of Personality (3). An examination of various theories of personality. Consideration is given to traditional and contemporary approaches to personality development.

PPE 3502 Psychology of Consciousness (3). Normal and altered states of human consciousness are analyzed from the perceptual and neuropsychological viewpoint. Broad topic areas include physiologically determined levels of arousal, from deep sleep to intense excitement; selective attention; perceptual plasticity; illusions; sensory deprivation; biofeedback; psychosomatic disease; hypnotism and suggestibility; as well as a critical treatment of the phenomena of parapsychology.

PPE 3670 Psychology of Myth (3). Mythology is studied from various psychological viewpoints. The process of Myth. Creation and the role of ritual in psychological enhancement are emphasized. Course focuses on classical mythology.

PPE 4104 Humanistic Psychology (3). Studies the methodology, research, and findings of the humanistic orientation in psychology. Topics such as counseling, encounter groups, higher consciousness, biofeedback, intentional communities, education, mysticism, and religion are examined from the humanistic viewpoint. Prerequisite: Prior completion of a course in Theories of Personality is recommended.

PPE 4325C Differential Psychology: Lecture (2) and Laboratory (3). Lectures and laboratory field experiences in the principles and methods underlying the administration, construction, and evaluation of psychological tests. Practice in the administration and interpretation of selected psychological tests. Prerequisites: STA 3123 or an equivalent introductory course in statistics, and PSY 3213.(Lab fees assessed)

PPE 4514 Psychology of Dreams and Dreaming (3). An in-depth examination of the most important psychological theories of dream function and of the use of dreams in different therapeutic approaches. The current research on the physiology and psychology of sleep is also evaluated. Prerequisite: Theories of Personality or its equivalent.

PPE 4604 Psychological Testing (3). An introduction to the rationale underlying the use of psychological tests. Topics include basic test terminology, test administration, interpreting standard scores, reliability, validity, tests of intelligence, interest inventories, personality tests, the ethics of testing, and the fairness of tests for different segments of the population. Prerequisites: STA 3123 or equivalent.

PPE 4930 Topics in Personality (VAR). Special topics will be announced in advance.

PSB 4003 Introductory Bio-Psychology (3). A study of the more important psychobiologic correlates of behavior in basic psychological phenomena.

PSB 4315 Neuropsychology (3). The relation of brain to cognition and behavior. An introduction to the study of the effects of brain damage on psychological processes.

PSY 2020 Introductory Psychology (3). Psychological principles underlying the basic processes of sensation, perception, cognition,

learning, memory, life-span developmental, social behavior, personality, abnormal behavior, and psychotherapy.

PSY 3213 Research Methods in Psychology (3). Basic methods in contemporary psychology. Emphasis on the role of methodology and experimentation in subfields of psychology. Students evaluate different designs and conduct original research projects. Prerequisite: STA 3123. (Lab fees assessed)

PSY 3930 Psychology of Humor (3). A study of the development of sense of humor in comedians and audiences; its expression in the production and appreciation of comedy, etc.; its psycho-physiologic-social correlates; its effect in maintaining well-being and preventing illness; and its role in human relations.

PSY 4801 Metatheory in Psychology (3). Issues related to the meta-theoretical foundation of psychology, and history and systems of psychology.

PSY 4900 Independent Readings in Psychology (VAR). Limited to qualified students who have permission from a faculty member and who present a plan of study including area and objectives. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their study. Offered for Pass/Fail only.

PSY 4914 Honors Research Project (VAR). Limited to qualified seniors seeking honors in psychology. Students must submit a research plan and have a research advisor's approval of the research project prior to enrollment in the course. A written report of the research in the A.P.A. publication style must be submitted for evaluation before credit will be awarded. Offered for Pass/Fail only.

PSY 4916 Independent Research in Psychology (VAR). Limited to qualified students who have permission from a faculty member and who present a written proposal for research. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their research.

PSY 4930 Special Topics in Psychology (VAR). Special topics will be announced in advance.

PSY 4931 Senior Seminar in Psychology (1). An advanced seminar for seniors. Analysis of major contemporary trends in psychological theory and research.

PSY 4932 Psychology of Human Communication (2). PSY 4932L Psychology of Human Communication Lab (3). This course covers psychological theory, research and application in the area of human communication. Prerequisite: STA 3123, PSY 3213.(Lab fees assessed)

PSY 4941 Independent Field Experiences in Psychology (VAR). Limited to qualified students who have permission from a faculty member and who present a plan of study including area and objectives. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their experiences.

PSY 5206C Fundamentals of Design of Experiments (3). CRD and RCB designs. Latin square designs. Factorial, nested and nested-factorial experiments. Fixed, random and mixed models. Split-plot designs. Covariance analysis. Prerequisites: STA 3122 and 3123, or their equivalents.

PSY 5216 Proseminar: History and Systems of Psychology (3). An examination of the historical foundations of modern psychology and survey of current systems and schools of psychology. Prerequisites: Graduate standing or permission of the instructor.

PSY 5246C Multivariate Analysis in Applied Psychological Research (3). Covers basic techniques of multivariate analysis, emphasizing the rationale and applications to psychological research. Includes multiple regression, Hotellings T#, MANOVA, principle component analysis, and factor analysis. Prerequisite: STA 3123 or equivalent; linear algebra recommended.

PSY 5908 Directed Individual Study (VAR). Under the supervision of an instructor in the graduate degree program, the graduate student delves individually into a topic of mutual interest which requires intensive and profound analysis and which is not available in a formal offering. May be repeated once. Prerequisite: Permission of the instructor.

PSY 5917 Psychology Research Proseminar (3). Specialized research and presentation to faculty members in his or her major research area. Seminar style. This course is intended as a core course for the masters program in psychology. Prerequisite: Full graduate admission.

PSY 5918 Supervised Research (VAR). Research apprenticeship under the direction of a research professor or a thesis advisor. Prerequisite: Full graduate admission.

PSY 5939 Special Topics in Psychology (3). Special topics will be announced in advance.

SOP 2772 Psychology of Sexual Behavior (3). An examination of the nature, development, decline, and disorders of sexual behaviors, primarily from the perspectives of normal adjustment and interpersonal relations. Discussion also addresses love, intimacy, and similar emotionally charged socio-psychological topics. Modern and popular treatment approaches - including the 'new sex therapies' are critically evaluated.

SOP 3004 Introductory Social Psychology (3). Introduction to the study of the relationship of the individual to social systems, including topics such as social behavior, attitude development and change, social conflict, group processes, mass phenomena, and communication.

SOP 3015 Social and Personality Development (3). This course provides a survey of social and personality development throughout the life cycle. Emphasis will be placed on the interaction between psychological and environmental variables in life-span development changes.

SOP 3742 Psychology of Women (3). An examination of women from various perspectives, such as biological, anthropological, mythological, religious, historical, legal, sociological, and psychoanalytical points of view. Discussions of ways in which these various perspectives influence the psychological development of contemporary women.

SOP 3932 Psychology of Drugs and Drug Abuse (3). This course will cover some basic information about the nature and effects of drugs abused, the social and personal dynamics involved in the phenomena of drug abuse and the various rehabilitation programs

currently being employed to combat drug abuse.

SOP 4050 Social Psychology in Latin America (3). Upper division seminar on Social Psychology in Latin America. The course will provide the student with the opportunity to survey the literature and research in social psychology from different countries in Latin America and to compare that material with on-going research and literature in the United States. Prerequisites: SOP 3004 and reading knowledge of Spanish.

SOP 4215 Experimental Social Psychology: Lecture (2) and Laboratory (3). The primary purpose of this course is to have students conduct actual social psychological experiments. Lecture material will be secondary to (and in the interest of) allowing students to execute representative experiments in areas such as attitude measurement and change, group structure, and communication, etc. Prerequisites: PSY 3213 and STA 3123. (Lab fees assessed)

SOP 4331 Experimental Health Psychology Lecture (2). The methodological tools to design, conduct, analyze, and interpret a study of some aspect of health and illness. Lectures provide an overview of theory in health psychology. Prerequisite: STA 2122/3123 and PSY 3213.

SOP 4331L Experimental Health Psychology Laboratory (3). The methodological tools to design , conduct, analyze, and interpret a study of some aspect of health and illness. Lectures provide an overview of theory in health psychology and labs provide opportunities to operationalize theories and constructs in psychology. Prerequisite: STA 2122/3123 and PSY 3213.

SOP 4414 Attitudes and Social Behavior (3). A review of classic and contemporary social psychological research on attitudes and persuasion. Emphasis will be placed on using persuasion processes to ameliorate social problems. Prerequisite: PSY 2020.

SOP 4522 Social Motivation (3). Focuses upon those sources of human motivation that are a consequence of man's social-interpersonal environment and his striving to obtain valued goals. Topics discussed include test-taking anxiety, alienation and affiliation motivation, internal vs. external orientation, achievement motivation, etc. The measurement of social motives and their roots and consequences for behavior are discussed.

SOP 4525 Small Group Behavior (3). Introduction to the study of the structure and function of groups, emphasizing the behavior of individuals as affected by the group. The course focuses on experimental evidence concerning such topics as social facilitation, group decision making, phases in group development, physical factors in group behavior, etc.; rather than upon student experience in sensitivity or encounter training.

SOP 4645 Consumer Psychology (3). This course addresses the psychological components contributing to satisfaction and dissatisfaction in buying and selling transactions. The consequences of such transactions, as they affect the environment in which we live as well as society in general, are examined. The interface between business, labor, government, and the consumer as all four groups are involved in consumer affairs is analyzed objectively.

SOP 4649 Experimental Consumer Psychology: Lecture (2) and Laboratory (3). Using the interactional workshop and objective observational methods, students will be required to conduct original research projects related to solving consumer affairs problems. Laboratory requirements include both on-and off-campus work. The former emphasizes techniques and evaluation. The latter is necessary for the gathering of data. Prerequisites: PSY 3213 and STA 3123. (Lab fees assessed)

SOP 4662 Organizational Psychology(3). Focuses on the "organizational" topics associated with the field of industrial/organizational psychology. Includes, leadership, team effectiveness, work and family issues.

SOP 4712 Environmental Psychology (3). An introduction to the study of human-environment transactions, with an emphasis on applications of physiological, psychological, and social theories.

SOP 4714 Environment and Behavior: Lecture (2) and Laboratory (3). Students gain experience with laboratory and field techniques used in the study of the reciprocal relationship between the physical environment and human behavior. Prerequisite: PSY 3213 or permission of the instructor. (Lab fees assessed)

SOP 4834 Psychology of Health and Illness (3). Course provides an overview of the field of behavioral medicine, the interface of psychology with health and health care. Psychological factors in illness, health, and health delivery systems will be covered. Prevention and early intervention will be stressed.

SOP 4842 Legal Psychology (3). Particular emphasis will be given to interpersonal courtroom processes. Topics considered include scientific jury selection, proximics, persuasive argumentation, witness demeanor, eyewitness testimony, and similar influences upon juror decision making.

SOP 5058 Proseminar in Social Psychology (3). An in-depth examination of the role of social psychology in the social sciences and the major substantive problems as they relate to contemporary societal issues. Minimum prerequisite: An introductory course in social psychology or its equivalent.

SOP 5081 Psychological Influences On Health and Illness (3). Provides a comprehensive review of theory, research, and interventions in the field of health psychology. Prerequisite: Graduate standing or permission of the instructor.

SOP 5316 Theories and Methods of Cross-Cultural Research (3). An intensive analysis of contemporary theories and methods of cross-cultural research in psychology including topics such as: culture as a research treatment, differential incidence of personality traits, the use of ethnographies, 'etic' vs. 'emic' distinction. Prerequisite: Graduate standing or permission of the instructor.

SOP 5616 Social Psychology of Organizations (3). The application of concepts and theories from social psychology and sociology to the organizational setting. Emphasis would be on role theory, value formation and the operation of norms, including their development and enforcement. Formal and informal organization structure, power and authority concepts, and leadership theories will be covered. Communication processes and networks and their effects on task accomplishment and satisfaction will be included.

Religious Studies

Nathan Katz, *Professor and Chairperson*
Christine Gudorf, *Professor*
Steven Heine, *Professor and Undergraduate Program Director*
James Huchingson, *Associate Professor*
Erik Larson, *Assistant Professor*
Lesley Northup, *Associate Professor and Graduate Program Director*
Jacob Olupona, *Visiting Distinguished Professor*
Terry E. Rey, *Assistant Professor*
Oren B. Stier, *Assistant Professor*

Affiliated Faculty
Thomas A. Breslin
Bongkil Chung
Daniel A. Cohen
Paul Draper
Christopher J. Gray
Mitchell B. Hart
Marilyn Hoder-Salmon
Rositta Kenigsberg
David L. Lee
Felice Lifshitz
Mohiaddin Messbahi
Joseph F. Patrouch
Felix Pomeranz
Meri-Jane Rochelson

Bachelor of Arts in Religious Studies

Degree Program Hours: 120

Lower Division Preparation

Common Prerequisites

No specific courses required; all students are encouraged to complete the Associate in Arts degree.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Recommended Courses: Religion, Philosophy, History.

Upper Division Program: (60)

Required Areas

The Religious Studies major serves as a basis for students who wish to pursue the study of religion or theology as a career, for students preparing for a career in counseling, education, business, law or medicine, or for students who wish to undertake a dual major in a related field of study. The major is designed to allow students to focus either on comparative topics in a critical approach to understanding religious phenomena and their relation to society in a broader cultural context or on the theory and practice of a specific religious tradition in its historical setting.

Required Courese

The major requires 33 credits distributed in the following sequence:

1. **Foundation Courses** (6 credits), selected from a group of courses that provide students with an introduction to multicultural approaches and interdisciplinary methodologies in the study of religion and thus a *foundation* for more specialized studies:

REL 2011	Relgion, Analysis and Interpretation
REL 3027	Meditation and Mystical Traditions
REL 3091	Joseph Campbell & the Power of Myth
REL 3148	Violence and the Sacred
REL 3170	Ethics in World Religion
REL 3211	Jesus and the Early Christians
REL 3302	Studies in World Religions
REL 3492	Earth Ethics

2. **Focus Courses** (24 credits), including 18 or more credits in Religious Studies and up to 6 credits in Related Areas, in *focus* or *specialized* courses selected at the 3000 or above level. Related Areas are selected from courses in Art History, English, History, Humanities, International Relations, Philosophy, Psychology, or Sociology/Anthropology, in order to further enhance the interdisciplinary nature of religious studies. Through these courses the student develops an area of concentration in one of the following topics:
   a) Comparative Studies of Religion (comparative studies of myth and ritual, textual studies, or social scientific studies), **OR**
   b) Studies of a Specific Religious Tradition (in-depth studies of an eastern, western, indigenous, or syncretic tradition), **OR**
   c) Religion, Culture and Values (analysis of religion in relation to women's studies, science, the environment, society, or ethics).
3. **Capstone Course** (3 credits), a senior or *capstone* seminar in *advanced* studies of religion:

REL 4030	Methods in the Study of Religion, **OR**
REL 4205	Current Methods in Studies of Sacred Texts

General Electives 27

The College of Arts and Sciences requires for the bachelor's degree that a student take at least nine hours outside the major discipline, of which six hours must be taken outside the major department.

Remarks: A complete description of the Religious Studies Program is contained in a brochure available at the Department of Religious Studies. Students should refer to the brochure for specific requirements of the major program. Students select their required courses in religious studies with the approval of the Undergradute Program Director.

Students are also encouraged to consider a dual major i.e., simultaneously to meet the requirements of two academic majors.

The Department serves the community and professional groups by offering courses off campus. For further information concerning these courses consult the department.

Minor in Religious Studies

A student majoring in another academic discipline can earn an academic minor in religious studies by taking at least four REL courses (12 upper division semester hours). Students are encouraged to take REL 3302 as one of these courses.

Honors Track in Religious Studies (B.A.)

Requirements:

a. To earn the B.A. with Honors in Religious Studies, a student must maintain a 3.5 GPA in religious studies courses.
b. Candidates for the B.A. with Honors in Religious Studies will complete the same requirements as for the B.A. major with one exception: among the "Focus Courses" 21 semester hours of course work will be taken plus 3 semester hours of "Religious Studies Research," during which a thesis or honors paper will be proposed, researched, written and defended orally.
c. In the semester prior to graduation, the student will enroll in "Religious Studies Research" (REL 4912), in which he/she will expand a term paper into an honors paper/thesis, or will begin a thesis anew, under the direction of an appropriate member of the religious studies faculty.
d. When the thesis is approved by the faculty member, the

coordinator of REL 4912 will organize and schedule a defense of the honors paper/thesis, at which the student will present his/her research and will respond to questions from faculty and students. This requirement will be deemed to have been met upon a majority positive vote of faculty.

e. The honors paper/baccalaureate thesis normally would be approximately 25-35 pages, must be presented according to FIU regulations (available in the department office), and will be deposited in the FIU Library. The honors paper/thesis must demonstrate that the student has mastered skills in defining a topic, research and expository writing, as well as oral skills required for the presentation and defense of the honors paper/thesis.

Course Descriptions

Definition of Prefixes

GRE-Ancient Greek; REL-Religion; HBR-Biblical Hebrew; ASN-Asian Studies.

ASN 4510 Dynamics of Asia (3). An interdisciplinary study of the classical and contemporary periods in Asian civilizations, including tradition and modernization, culture and the arts, gender and diversity, and international relations.

GRE 3041 New Testament Greek II (3). Continuation of New Testament Greek I. Prerequisites: New Testament Greek I or permission of the instructor.

GRE 3050 New Testament Greek I (3). Introduces the Greek language of the New Testament, and other works of the ancient period to enhance the understanding of translated texts. A portion of the Gospel of John is studied.

HBR 3100 Biblical Hebrew I (3). Introduces the language of the Hebrew Scriptures, portions of which are read in class.

HBR 3101 Biblical Hebrew II (3). A continuation of Biblical Hebrew I. Prerequisite: Biblical Hebrew I.

REL 2011 Religion: Analysis and Interpretation (3) Introduces methods of critical reflection on religion and some of their applications to fundamental topics such as knowledge, value, the sacred, the individual and human society.

REL 2936, 4936 Special Topics (1-6). In-depth study of topics of special interest in religion.

REL 3002 Ritual in Religion and Culture (3). Examines ritual and its roots, functions, analysis, and meaning, both in religious contexts and as it is assimilated and adapted in the wider culture.

REL 3026 Ghosts, Spirits, and Folk Religions (3). Movements in folk or popular religions in relation to the official dimension of the major traditions, including the role of ghosts and spirits, visions and dreams, and healing and prophecy.

REL 3027 Meditation and the Mystical Traditions (3). The history, philosophy, and cultural impact of the role of meditation in various mystical traditions, including movements such as Kabbalah, Neo-Platonism, Sufism, Yoga, Tantra, Taoism, and Zen Buddhism.

REL 3091 Joseph Campbell and the Power of Myth (3). Examines the nature of myth, particularly from the perspective of mythologist Joseph Campbell, and focuses on his contribution to the study of myth.

REL 3100 Introduction to Religion and Culture (3). This course explores both the ways religion uses culture to express its basic concerns and the ways that culture and lifestyle reflect religious perspectives. Attention will be given to traditional and popular expressions of American culture.

REL 3110 Religion and Television (3). Examines the interaction of religion and television; television as a vehicle for religious programming, news, and values; and religion as a dynamic influence on the medium.

REL 3111 Religion in Film (3). Students examine religious themes, images, symbols and characters in various feature and short films, a specific method of critical analysis, and the religious and societal effects of contemporary films.

REL 3112 Religion and Literature (3). Using fictional and non-fictional autobiographical texts, this course examines how autobiography can serve as the articulation of a spiritual quest.

REL 3120 Religion in America (3). Historical survey of the development and influence of religions in the U.S. with emphasis on the unique role of religion in American culture.

REL 3131 Sects and Cults (3). Explores the American tendency to generate new religious movements and examines a variety of these sects and cults.

REL 3145 Women and Religion (3). Explores the involvement, portrayal, and roles of women in religion, from early goddess religions through the cult of Mary to contemporary feminist theology.

REL 3147 Religion and the Family (3). A survey of recent and contemporary debates in western religion and society over the family, family roles, and selected issues in parenting (adoption, child abandonment, abortion, infanticide, and self-sacrifice) with some comparative treatment from non-western and minority traditions (Hinduism, Judaism, Navajo).

REL 3148 Violence and the Sacred (3). The role of religion in the inspiration, justification, avoidance, or constraint of various forms of overt or covert violence. Relevant issues in social theory.

REL 3160 Science and Religion (3). The methods, assumptions, goals of religion will be compared with those of the natural and human sciences. Specific issues, such as evolution, sociobiology, and the new astronomy will be considered to illustrate similarities and differences between the two approaches.

REL 3170 Ethics in World Religion (3). Examines the nature of ethics in its relationship to various faith orientations around the world and surveys specific ethical problems in world religions.

REL 3171 AIDS, Ethics and Religion (3). Examines ethical issues in AIDS as framed by churches, by persons with AIDS (PWA) networks, and by AIDS workers.

REL 3172 Reproductive Ethics (3). Surveys U.S. religion on family, surrogacy, artificial insemination and in vitro fertilization, contraception, abortion, and fetal hazards in workplace.

REL 3178 Sex and Religion (3). A survey of religious understandings of sexuality, gender and reproduction with special emphasis on contemporary issues.

REL 3180 Medical and Bioethics (3). A survey of religious treatment of ethical issues in health care and medical research.

REL 3194 The Holocaust (3). Examines different responses to the Holocaust—both during the years when it took place and afterwards. What does it mean to be a Jew, a Christian, a human being in the shadow of the Holocaust?

REL 3197 Topics in Race and Religion (3). Examines the role of religion in specific historical events such as the US civil rights movement, the rise/fall of S. African apartheid, or the subjugation of the Amerindians.

REL 3209 The Dead Sea Scrolls (3). Surveys scholarship on the Dead Sea Scrolls, including their significance for the study of the Bible and the history of Judaism and Christianity.

REL 3220 Moses, Priests and Prophets (3). In-depth studies of selected portions of the Hebrew Scriptures, paying close attention to the history of ancient Israel and situating the texts within the cultural milieu of the ancient Near East.

REL 3250 Jesus and the Early Christians (3). Examines the life of Jesus and the New Testament Documents; what we know about Jesus, how we know it, and how and why early Christianity spread so rapidly.

REL 3270 Biblical Theology (3). Explores the ideas of God, man, redemption, ethics, and the after-life, tracing each through its development from earliest Hebrew thought to the rise of post-biblical Judaism and Christianity.

REL 3280 Biblical Archaeology (3). Explores the nature, goals and methods of biblical archaeology. A survey of the most important sites and finds that have given us a new understanding of the world of the bible.

REL 3302 Studies in World Religions (3). Examines the origins, teachings, and practices of selected world religions. The specific religions selected for examination may vary from semester to semester.

REL 3313 Sources of Modern Asian Society (3). Is the contemporary period a replay of ancient relio-cultural patterns, or does it pose unique challenges? Explores how classical Hinduism, Confucianism, and Buddhism affect modern India, the "Tigers", Sri Lanka and Japan.

REL 3320 Moses, Jesus, Muhammed (3). The lives of Moses, Jesus, Muhamed and the communities they founded. Each religion's teachings are explored to reveal in what ways they are similar and in what ways unique.

REL 3325 Religions of Classical Mythology (3). Examines the beliefs and practices of ancient Egyptian, Semitic, Greek, and Germanic religions, their influences on later civilization and religious thought, and the possible continuing insights offered by each.

REL 3330 Religions of India (3). The myriad religions of India, from prehistoric origins to contemporary politicized Hinduism. Schismatic movements (Buddhism, Jainism) and "Indianized" extrinsic religions (Judaism, Christianity, Islam, Zoroastrianism).

REL 3362 Islamic Faith and Society (3). A survey of the main facets of Islamic religion and societies from the time of Muhammad to the present.

REL 3383 Religions of the Caribbean (3). Developments, beliefs, rituals, and symbolic system of religious traditions of the Caribeean. Religion and society in Caribbean history.

REL 3392 Jewish Mysticism (3). An overview of the history and philosophy of Kabbala and an exploration of selected practices and techniques of Jewish mysticism.

REL 3443 Liberation Theologies (3). A survey of the major themes in and methodological distinctiveness of Latin American, African American and Feminist Liberation Theologies.

REL 3492 Earth Ethics (3). This course will explore resources from philosophy and religion that could contribute to a solution of the current environmental crisis. Ethical issues of the environment will especially be examined in the light of these resources.

REL 3505 Introduction to Christianity (3). Introduces the basic beliefs and practices of Christianity in their historical and modern forms, including both common and distinctive elements of Catholicism, Protestantism, and Eastern Orthodoxy.

REL 3510 Early Christianity (3). This course will survey the first development of Christian thought and practice from its beginnings as a primitive church to its establishment as a major faith in the Middle Ages. It will then consider the relevance of this early experience for modern movements of this faith.

REL 3520 Medieval Christianity (3). Surveys Christianity during the middle ages, including its development, medieval theology and religious practices, and its on-going influence in Christianity.

REL 3530 Protestantism (3). Surveys Protestantism from the Reformation to the present, including the formation of Protestant theology, the relationship of Protestantism to culture and contemporary developments.

REL 3532 Reformation (3). The lives and thoughts of the leaders of the Protestant Reformation will be the focus of this course. Significant attention will be given to the personal experiences and theological perspectives which directed the actions of such persons as Luther, Calvin, and Zwingli, as well as the movements they founded.

REL 3551 Mary and Jesus (3). Biblical scholarship and theological traditions regarding Jesus of Nazareth and Mary, his mother.

REL 3564 Modern Catholicism (3). Surveys Catholicism from the Vatican Council to the present, including developments in liturgy, theology, and the relationship of the Church to the world.

REL 3600 Judaism (3). An introduction to Judaism, following a brief historical overview. Lectures and discussions will focus on the themes of Text, Time, Space, People, and Memory in classical and contemporary manifestations.

REL 3601 The Ethics of Judaism (3). Examines Jewish approaches to ethical issues. Takes into account both traditional and nontraditional approaches which claim, in some way, to be authentically Jewish.

REL 3625 Introduction to Talmud (3). Through close readings (in English translation) of specific Talmudic texts, this course introduces students to the Talmud - the magnum opus of Rabbinic Judaism.

REL 4030 Methods in the Study of Religion (3). This course examines a number of the most important methods used in the academic study of religion, together with representative examples of the use of these methods. Prerequisite: Religious Studies major status or permission of the instructor.

REL 4146 Feminist Theology and Ethics (3). Surveys major Christian and Jewish feminists on revelation, sexuality and body, liturgy, religious community and other topics.

REL 4173 Technology and Human Values (3). This course will explore the sources and impact of modern technology from philosophical and religious perspectives. Topics to be discussed include the effects of technology upon the understanding of human nature, and the relationship among technology, the natural environment, and hopes for a livable human future.

REL 4205 Current Methods in Sacred Texts (3). This course introduces sacred texts and the methods and tools of their study, including translations, historical studies, hermenuetics, and the use of secondary resources. Prerequisite: Religion majors only.

REL 4224 The Prophets and Israel (3). Examines the setting of the prophets in the history of Israel, their contributions to biblical religion, and their use in later religious and renewal movements.

REL 4251 Jesus and Paul (3). Examines the historical settings, teachings, significance, and later interpretations of Christianity's founder and its foremost interpreter.

REL 4311 Religious Classics of Asia (3). Classical religious texts of Asian traditions. Content may vary. Course may be repeated with change in content.

REL 4312 Jews of Asia (3). Surveys the history, culture, and literature of the Jews of Asia, with emphasis on the Cochin Jews, the Bene Israel of Bombay and environs, the 'Baghdadis' of Indian port cities, and the Chinese Jews of Kaifeng.

REL 4340 Survey of Buddhism (3). The course will explore the central themes of the main schools of Buddhism developed in India, China, Japan, and Korea. The themes will be examined from religious, historical, and philosophical points of view.

REL 4345 Zen Buddhism (3). This course explores Zen (Ch'an) Buddhism in its historical, theoretical, and practical dimensions with a specific aim of examining the theme that the Buddha mind can be actualized by awakening to one's own Buddha-nature.

REL 4351 Religion and Japanese Culture (3). The impact of the traditional religions, shinto and buddhism, on the intellectual and cultural history of Japan, especially literature and art, from the ancient and classical through the modern periods.

REL 4420 Contemporary Religious Thought (3). A survey of major figures in contemporary theology for the purpose of understanding their thought and its application to current issues in religion and society.

REL 4425 Contemporary Issues in Christian Theology (3). Examines contemporary efforts to reflect on traditional topics in Christian theology, such as God and human nature, and explores the role of theology in addressing selected social and cultural issues.

REL 4441 Religion and the Contemporary World (3). An examination of reflection by religious thinkers and others who employ religious perspectives, concerning select conceptual issues of critical importance in the contemporary world.

REL 4461 Topics in the Philosophy of Religion (3). Examines a specific topic in the philosophy of religion, such as faith and reason, religious experience, or an important thinker. It may be repeated with permission of the instructor.

REL 4481 Contemporary Latin American Religious Thought (3). The major trends of religious thought in Latin America and their impact on the society of the area will be investigated. Special reference will be made to Post-Vatican II theology and to very recent theologies of liberation.

REL 4613 The Modernization of Judaism (3). Explores the ways in which religious beliefs and traditional concepts of Jewish self identity have changed as a result of emancipation and the participation of Jews in the modern Western world.

REL 4910 Independent Research (1-6). Topics will be selected to meet the academic needs of the individual student. Prerequisite: Permission of the instructor.

REL 4912 Research Seminar in Religious Studies (3). Working on a variety of individual research projects, students explore research issues and methods. Research projects must be approved in advance. Course may be repeated. Prerequisite: Permission of the instructor.

REL 4931 Religious Studies Seminar (3). This seminar is designed for majors and other qualified students approved by the Department. The specific topic will be selected and announced in advance. The number of participants will be limited.

REL 4937 Special Topics (3). In-depth study of topics of special interest in religious studies.

REL 5023 Religious Ritual (3). Examines the critical relationship of ritual, religious practice and belief, and culture, while introducing the principles and methods of ritual studies. Prerequisite: Graduate standing or permission of the instructor.

REL 5025 Myth and Religion (3). Investigates the role, function, and meaning of myth in religious experience and practice through an examination of specific myths, mythic patterns, and critical theories. Prerequisite: Graduate standing or permission of the instructor.

REL 5130 North American Religion (3). Historical examination of religious groups and influences in North America, focusing on their contributions and cultural impact. Prerequisites: Graduate standing or permission of the instructor.

REL 5131 Sects, Cults, and New Religions (3). Explores and critically analyzes the multiplicity of new American religious movements and the unique combination of factors that has encouraged them. Prerequisites: Graduate standing or permission of the instructor.

REL 5145 Women and Religion (3). Examines the influence of religion on social construction of gender and the definition of woman's nature and role, with a focus on Western developments. Prerequisite: Graduate standing or permission of the instructor.

REL 5160 Science and Religion (3). Surveys the interaction between science and religion from conflict models to integration; special attention

to specific natural sciences including cosmology and biology. Prerequisite: Graduate standing or permission of the instructor.

REL 5181 Religions and Ethics (3). Investigation of methods, resources for ethics in world religions, and some examples of issues. Prerequisite: Permission of the instructor.

REL 5183 Ethics and Environment (3). A study of cultural and religious sources of contemporary ethical attitudes and values about the environment. Also includes consequences of these for specific environmental issues. Prerequisite: Graduate standing or permission of the instructor.

REL 5184 Sex, Ethics, and Religion (3). Religious treatment of sexual activity, desire and procreation in major religions, with special focus on contemporary scientific research on sexuality and spirituality. Prerequisite: Graduate standing.

REL 5208 Studies of the Dead Sea Scrolls (3). Overview of the Dead Sea Scrolls; explores the new techniques being used in their study.

REL 5211 Bible I: The Hebrew Scriptures (3). Extensive reading in the Hebrew Scriptures; how the various texts of the Hebrew Scriptures came to be written, and how they can be interpreted - both within the context of faith communities and within the cultural contexts out of which the texts were written.

REL 5240 Bible II: The New Testament (3). History, theology, and interpretation methods of the New Testament. Prerequisite: Graduate standing or permission of the instructor.

REL 5331 Religions of India (3). Topics include: religion in prehistoric and ancient India, classical Hindu texts and schismatic movements, medieval theism, the acculturation of extrinsic religions, Hindu-Muslim-Sikh syncretism, and the modern period. Prerequisite: Graduate standing or permission of the instructor.

REL 5461 Religion and Philosophy (3). Examines the use of philosophical reasoning to justify religious belief or its rejection. Such topics as natural theology, atheism and fideism will be examined. Prerequisite: Graduate standing or permission of the instructor.

REL 5488 Theology and Liberation Movements (3). Comparison of Latin American, feminist, and African American theologies of liberation, including methods, social analysis, social location, interlocutor, ecclesiology, theology, eschatology and use of scripture. Prerequisite: Graduate standing or permission of the instructor.

REL 5501 History of Christianity I: 100-1400 (3). Christianity from its origins to the Middle Ages. Doctrinal and organizational development of the church and characteristic aspects of its spiritual life.

REL 5502 History of Christianity II: 1400-Present (3). Survey of movements, reforms, divisions, and major ideas within institutional Christianity, 1400 to present.

REL 5515 History of Early Christianity (3). Origin and growth of Christianity from the first to the fifth century, and the adaptation of its message to the Greco-Roman world. Prerequisites: Graduate standing or permission of the instructor.

REL 5565 Modern Catholicism (3). Theology and liturgical practice in the Roman Catholic Church from Trent (16th c) to the present, with primary and secondary sources. Prerequisite: Graduate standing or permission of the instructor.

REL 5600 Studies in Judaism (3). Historical overview of Jewish belief and practice, with special consideration of Jewish ritual life. Prerequisites: Graduate standing or permission of the instructor.

REL 5606 Rabbinic Judaism (3). The theology and ideologies of the 1700-year period in the history of Judaism known as Rabbinic Judaism.

REL 5613 Modernization of Judaism (3). Explores the ways in which religious beliefs and traditional concepts of Jewish self identity have changed as a result of emancipation and the participation of Jews in the modern Western world.

REL 5614 Ancient Judaism (3). The history, literature and characteristic institutions of Judaism from the Persian period to Amoraic times. Attention given to developments in the land of Israel and the diaspora. Prerequisite: Graduate standing or permission of the instructor.

REL 5615 Medieval Judaism (3). The works of major thinkers in Medieval Judaism, including Maimonides, Nahmanides, Halevi, Luzatto, and such topics as Jewish mysticism (Kabalah) and Hasidism.

Sociology and Anthropology

Stephen M. Fjellman, *Professor and Chairperson and Associate Dean, Honors College*
G. Janice Allen-Kelsey, *Assistant Professor*
Jerald B. Brown, *Associate Professor*
Janet M. Chernela, *Professor*
Nadine Fernandez, *Assistant Professor*
Chris Girard, *Associate Professor and Director, Comparative Sociology, Graduate Program*
Hugh Gladwin, *Associate Professor and Director, Institute for Public Opinion Research*
Guillermo J. Grenier, *Associate Professor and Director, Center for Labor Research*
Antonio Jorge, *Professor*
A. Douglas Kincaid, *Associate Professor and Associate Director, LACC*
Lilly M. Langer, *Associate Professor*
Abraham D. Lavender, *Professor*
Barry B. Levine, *Professor*
Shearon A. Lowery, *Associate Professor*
Sarah Mahler, *Associate Professor*
Anthony P. Maingot, *Professor*
Kathleen Martin, *Associate Professor*
James A. Mau, *Professor and Vice-Chancellor*
Betty Hearn Morrow, *Associate Professor*
William T. Osborne, *Associate Professor*
Walter Gillis Peacock, *Associate Professor and Program Director at the International Hurricane Center*
Lisandro Perez, *Associate Professor and Director, Cuban Research Institute*
Jean M. Rahier, *Associate Professor, African-New World Studies*
Robin Sheriff, *Assistant Professor*
Alex Stepick, *Professor and Director, Immigration and Ethnicity Institute*
Richard Tardanico, *Associate Professor*
William T. Vickers, *Professor*
Lois West, *Associate Professor*

Bachelor of Arts in Sociology/Anthropology

Degree Program Hours: 120

Lower Division Preparation

To be admitted to the upper division, students must meet the University's and College's admission requirements. Students without an AA degree must have the background to handle advanced academic work.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable to the program.

Required Courses

Introduction to Anthropology, Introduction to Cultural Anthropology, or Introduction to Sociology. If the student does not have one of these courses, it will be required as part of the upper division program.

Recommended Courses

Other anthropology and sociology courses; ecology, economics, geography, history, political science, psychology; arts, biology, English, foreign languages, mathematics, philosophy.

Upper Division Program (60)

Required Courses (30)

Core Courses

ANT 3086	Anthropological Theories	3
SYA 3300	Research Methods	3
SYA 4010	Sociological Theories	3
ISS 3330	Ethical Issues in Social Science Research	3

Area Courses: Either Anthropology or Sociology 18

Electives: with the approval of the faculty advisor 30

A grade of 'C' or higher is required for all courses that make up the major (12 semester hours of core courses and 18 semester hours of area courses in Sociology and Anthropology).

Minor in Sociology and Anthropology

Prescribed Courses

Fifteen credits in the Department of Sociology/Anthropology including two courses from the following:

ANT 3086	Anthropological Theories	3
SYA 3300	Research Methods	3
SYA 4010	Sociological Theories	3
ISS 3330	Ethical Issues in Social Science Research	3

Course Descriptions

Definition of Prefixes

ANG Anthropology Graduate; ANT-Anthropology; ISS-Interdisciplinary Social Sciences; SYA-Sociological Analysis; SYD-Sociology of Demography and Area Studies; SYG-Sociology, General; SYO-Social Organization; SYP-Social Processes. F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

ANG 5403 Ecological Anthropology (3). Theories of human adaptation, including environmental determinism, possibilism, cultural ecology, materialism, and evolutionary ecology. Credit for both ANT 3403 and ANT 5548 will not be granted. Prerequisite: Graduate standing or permission of the instructor. (SS)

ANG 5496 Social Research and Analysis (3). A graduate overview of the scientific methods used in intercultural studies. Includes the philosophical basis of science, research design, and hypothesis testing using both secondary and original data. Students will conduct a research project in this course. Prerequisite: Graduate status or permission of the instructor. (F)

ANG 5905 Directed Individual Study (VAR). Supervised readings and/or field research and training. Prerequisite: Permission of the instructor. (F,S,SS)

ANG 5915 Directed Field Research (VAR). Permission of the instructor required. (F,S,SS)

ANT 2000 Introduction to Anthropology (3). This course surveys the four subfields of anthropology, including physical anthropology and human evolution, archaeology, cultural anthropology, and linguistics. Introduces basic anthropological theories and concepts. (F,S,SS)

ANT 3034 Anthropological Theories (3). This course examines the process of theory building and explanation in the social sciences, and outlines the historical and philosophical foundations of anthropological thought. Theorists and schools of thought reviewed include Darwin and evolution; Boas and historical particularism; Freud and culture and personality; and Malinowski and functionalism. (F,S)

ANT 3101 Introduction to Archaeology (3). The history of archaeology is traced from its origins to its emergence as a scientific discipline within anthropology. Students are familiarized with the concepts and methods of modern archaeology, and with the scientific goals of archaeological research. (F,S)

ANT 3144 Prehistory of the Americas (3). Early man in the Americas is examined through archaeological records. (S)

ANT 3241 Myth, Ritual, and Mysticism (3). A survey of anthropological approaches to the study of myth, ritual, and mysticism, as religious and symbolic systems. The social and psychological functions of myth and ritual in primitive and complex societies will be compared. (S)

ANT 3255 Peasant Society (3). Comparative study of peasant societies with emphasis on the concepts of folk community, traditional culture, and modernization. Data on peasantry in Latin America and other culture areas will be reviewed.

ANT 3302 Male and Female: Sex Roles and Sexuality (3). Cross-cultural ethnographic data will be utilized to examine the enculturation of sex roles, attitudes, and behavior; cultural definitions of maleness and femaleness; and varieties of human sexual awareness and response. (F)

ANT 3304 Voices of Third World Women (3). Deals with the literature in the social sciences and humanities written by women of the Third World or others who have recorded their testimony.

ANT 3403 Cultural Ecology (3). Systems of interaction between man and his environment; the role of social, cultural, and psychological factors in the maintenance and disruption of ecosystems; interrelations of technological and environmental changes. (SS)

ANT 3409 Anthropology of Contemporary Society (3). The application of classical anthropological methods and concepts to the analysis of contemporary American culture. Investigation of a unique cultural scene will involve the student in field work and the preparation of an ethnographic report. (F,S)

ANT 3442 Urban Anthropology (3). Anthropological study of urbanization and urban life styles, with particular emphasis on rural-urban migration and its impact on kinship groups, voluntary associations, and cultural values.

ANT 3462 Medical Anthropology (3). A survey of basic concepts; examination of preliterate and non-western conceptions of physical and mental health and illness; emphasis on cultural systems approach to the study of illness and health care. Background in biology, medicine, or nursing helpful. Prerequisite: Permission of the instructor. (S)

ANT 3476 Movements of Rebellion and Revitalization (3). Cross-cultural study of revolutionary, messianistic, and revitalization movements in tribal and peasant societies. Case materials include Negro-slave revolts, cargo cults, and peasant wars of the twentieth century (Mexico, China, Vietnam).

ANT 3500 Introduction to Physical Anthropology (3). A study of the biological history of man as interpreted through the theory of evolution, anatomy and the fossil record, contemporary population genetics, and the concept of race. (F)

ANT 3640 Language and Culture (3). An examination of the relationship between language and culture, the implications of language for our perceptions of reality, and the socio-cultural implications of language differences for interethnic relations and international understanding. (F)

ANT 3780 Anthropology of Brazil (3). Anthropological perspective on Brazilian society and culture. Covers classic and contemporary studies of Brazil including such topics as race, ethnicity, national identity, regionalism, and social organization. (S)

ANT 4164 Inca Civilization (3). A survey of Andean culture history with emphasis on Inca and pre-Inca civilizations. Includes discussion of peopling of South America, habitats, and the transition from foraging to village settlements, and the rise of indigenous empires. (S)

ANT 4211 - 4328 Area Studies (3). Ethnological survey of selected indigenous cultures. Areas to be studied include: (1) North America; (2) Africa; (3) Asia or Southeastern Asia; (4) China. Topics may vary. May be repeated for credit with change of topic. (F,S)

ANT 4224 Tribal Art and Aesthetics (3). This course deals with the social and cultural context and functions of art in preliterate societies as in sub-Saharan Africa, New Guinea, and North America. Topics include wood carving, bronze casting, singing, dancing, drumming, masquerading, theatrical performance, and all forms of oral literature. (F)

ANT 4273 Law and Culture (3). A cross-cultural examination of the practical and theoretical relationships between the legal system and other aspects of culture and society. (S)

ANT 4306 The Third World (3). An interdisciplinary, cross-cultural survey of the factors contributing to the emergence of the Third World. Significant political, economic, pan-national and pan-ethnic coalitions are analyzed. (F)

ANT 4312 American Indian Ethnology (3). An examination of the socio-cultural patterns of selected American Indian groups as they existed in the indigenous state, prior to European contact.

ANT 4324 Mexico (3). An interdisciplinary examination of the major social, cultural, economic, and political factors contributing to the transformation from the Aztec empire to colonial society to modern Mexico. (F)

ANT 4328 Maya Civilization (3). A survey of the culture and intellectual achievements of the ancient Maya civilization of Mesoamerica. Course includes: history and social-political structure, archaeology, agriculture and city planning, mathematics, hieroglyphics, astronomy, and calendars. (F,S)

ANT 4330 Contemporary Maya Cultures (3). Studies the Maya cultures of Mexico and Central America from the Conquest to the present. Investigates the political, social, economic, religious, and cultural life of contemporary Maya peoples. (F)

ANT 4332 Latin America (3). Native cultures of Mexico, Central and South America; the lowland hunters and gatherers, and the pre-Columbian Inca and Aztec Empires; the impact of the Spanish conquest. (F)

ANT 4334 Contemporary Latin American Women (3). The lives of 20th century Latin American women and gender analysis along class and

ethnic dimensions. Discussion of religion, family, gender roles, machismo, and women's roles in sociopolitical change. (F)

ANT 4340 Cultures of the Caribbean (3). An ethnological survey of native cultures and of the processes of culture contact and conflict in the Caribbean and Circum-Caribbean region. (F)

ANT 4343 Cuban Culture and Society (3). The diverse origins and manifestations of the culture of 20th-century Cuba. The social structure of the Cuban Republic and the profound institutional transformations caused by the Revolution of 1959. (S)

ANT 4352 African Peoples and Cultures (3). This course includes a survey of the cultures and civilizations of sub-Saharan Africa. It includes discussions of history, geography, sociopolitical structures, religion, art, music, and oral literature. (F)

ANT 4390 Explorations in Visual Anthropology (3). An examination of the use of film in anthropology, both as a method of ethnographic documentation and as a research technique for analyzing non-verbal modes of communication. Documentary films and cross-cultural data on paralanguage, kinesics, proxemics, and choreometrics will be reviewed and discussed. (F)

ANT 4406 Anthropology of War and Violence (3). The purpose of this course is to introduce the scientific study of human aggression and warfare from an evolutionary and cross-cultural perspective in order to gain a better understanding of the causes and consequences of such behavior, and to evaluate proposed options for the control of warfare.

ANT 4422 Kinship and Social Organization (3). Comparative study of kinship systems and the social organization in tribal, peasant, and industrial societies. Emphasis on the ethnographic record in anthropology. Prerequisites: ANT 2000 or permission of the instructor. (F)

ANT 4433 Psychological Anthropology (3). Cross-cultural studies in cognition, possession states, myth making and world view are examined. The interface of anthropology, psychology and psychiatry is reviewed. (S)

ANT 4451 Racial and Cultural Minorities (3). The study of selected ethnic and cultural groups, with particular emphasis on patterns of inter-ethnic and intercultural relationships. Minority groups studied may include Afro-Americans, Ameri-can Indians, Chicanos, Cubans, wo-men, senior citizens or prisoners. (F,S)

ANT 4461 Hallucinogens and Culture (3). Cross-cultural examin-ation of the political, religious, and sociocultural factors related to altered states of consciousness, including dreams and images. Applications to contemporary psychology are explored. (S)

ANT 4552 Primate Behavior and Ecology (3). This course covers the evolution of primates, and primate ecology, social organization, and intelligence. The course will provide students with opportunities to observe and study living primates. (F)

ANT 4723 Education and Socialization (3). A cross-cultural examination of educational and socialization processes, their functions in the larger society, and the value systems they transmit.

ANT 4905 Directed Individual Study (1-2). Supervised readings and/or field research and training. Prerequisite: Permission of the instructor. (F,S,SS)

ANT 4915 Directed Field Research (1-2). Permission of the instructor required. (F,S,SS)

ANT 4930 Topics in Anthropology (3). Special courses dealing with advanced topics in the major anthropological subdisciplines: (1) social and cultural anthropology, (2) applied anthropology, (3) physical anthropology, (4) linguistics, and (5) archaeology. Instruction by staff or visiting specialists. Topics to be announced. Instructor's permission required. May be repeated. (F,S)

ANT 4941 Holocaust Documentation Internship (3). History and significance of the Holocaust; issues in oral history; interviewing Holocaust survivors; transcribing and archiving interview data.

ANT 5318 American Culture and Society (3). Anthropological analysis of the cultures and subcultures of the United States, focusing on the social, ethnic, and regional organizations and their corresponding value and symbolic systems. Prerequisite: Graduate standing or permission of the instructor. (S)

ISS 3330 Ethical Issues in Social Science Research (3). An introduction to the problems of possibilities of ethical premises in the perspectives and work of social scientists. Examination of historical interrelationships between moral philosophies and developing scientific methodologies. Analyses of contemporary social ethicists' attempts to assume moral postures while examining social relations. Case studies involving issues such as nation building in areas of accelerated change including Africa and Asia. (F,S)

SYA 3300 Research Methods (3). An introduction to the scientific method and its application to anthropological and sociological research. Topics include: formulation of research problems; research design; field methods and collection of data; hypothesis testing and interpretation of results. (F,S)

SYA 3949 Cooperative Education in Social Sciences (3). A student majoring in one of the Social Sciences (Economics, International Relations, Political Sciences, Sociology, or Psychology) may spend one or two semesters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

SYA 4010 Sociological Theories (3). Examines the emergence of sociology as the study of social relations. Compares and contrasts the work of selected theorists, with respect to their methodologies, treatment of the emergence and consequences of modern society, political sociology, conception of social class, and analysis of the role of religion in society. The student is expected to gain in-depth knowledge of opposing theories, as well as an appreciation of the contingent nature of sociological theories. (F,S)

SYA 4011 Advanced Social Theory (3). An analysis of various classical and current sociological theories, with particular attention paid to their conceptions of man in society and the wider implications such conceptions have. The theories of Durkheim, Parsons, Weber, Goffman, Bendix, and Dahrendorf are examined.

SYA 4124 Social Theory and Third World Innovations (3). An examination of the contributions to social theory by intellectuals of the Third

World. Particular attention is paid to theory derived from classical Marxism.

SYA 4170 Comparative Sociology (3). A cross-cultural and cross-national survey of sociological studies, with particular emphasis on theoretical and methodological issues. Examples will be drawn from studies on culture patterns, social structures, sexual mores, power relationships and the ethical implications of cross-national research.

SYA 4330 Basic Research Design (3). Advanced course in social research, providing research practicum for studying patterns of human behavior; analyzing findings of studies, methodical and analytical procedures; reporting and explaining these results; and applying these inferences to concrete situations. Also acquaints the student with the use of computers in research in the behavioral sciences. (F)

SYA 4354 Historical Sociology (3). The authenticity and meaning of historical data for sociological research. Systematic theories in history are analyzed for their utility in sociology. Particular emphasis on the sociological uses of the comparative method in history.

SYA 4621 Sociology of the 20th Century (3). An examination of the sociological implications evident in the events of our modern world. Heavy reliance is placed on intellectual materials other than social science, especially literature.

SYA 4905 Directed Individual Study (VAR). Supervised readings and/or field research and training. Prerequisite: Permission of the instructor. (F,S,SS)

SYA 5135 Sociology of Knowledge (3). The study of the theoretical basis of knowledge and the inter-relatedness of knowledge and social factors, particularly as knowledge relates to institutional forms of behavior. (S)

SYA 5909 Directed Individual Study (VAR). Supervised readings and/or field research and training. Prerequisite: Permission of the instructor. (F,S,SS)

SYA 5941 Directed Field Research (VAR). Permission of the instructor required. (F,S,SS)

SYD 3600 The Community (3). The social group known as the community is identified and analyzed for its distinctive qualities. By distinguishing it from other social groups, its dominating force on the behavior of its members is isolated. Attention is given to the interaction of individuals and groups as they exist within the community. (S)

SYD 3620 Miami: An Urban Laboratory (3). Study of Miami and Dade County using sociological and anthropological techniques and theory, fieldwork assignments, readings and guest speakers. (F)

SYD 4237 Immigration and Refugees (3). Examines the causes and consequences of immigration and refugee flows. Focuses on sociological and anthropological issues.

SYD 4410 Urban Sociology (3). Study of the urban community, with particular attention to the problems associated with urban life. The development of urban societies is reviewed historically, and factors associated with this development are identified. (F)

SYD 4601 Community Organization (3). An intensive study of how communities are organized, with special emphasis on the interactive processes of the varied components of a community. Special study, permitting students to concentrate on interest areas, is required.

SYD 4610 Area Studies: Social Structures and Problems (3). Special courses on the social structures and related problems of specific geographical and cultural areas. Topics may vary. May be repeated for credit with change of topics.

SYD 4621 Cubans in the U.S. (3). An overview of Cuban migration to the U.S. and the establishment of Cuban communities in this country. Emphasis on the development and dynamics of the enclave in Miami.

SYD 4630 Latin American and Caribbean Social Structures (3). Exploration of the types of social structures, statuses, and roles, and the resulting distributions of power and authority in the hemisphere.

SYD 4700 Minorities/Race and Ethnic Relations (3). The study of social groups identified by racial or ethnic characteristics. Particular emphasis is given to the role of minorities in society, and the interactive process resulting from their contact with the majority. Social behaviors of minorities are reviewed and related to institutional structures and their accepted norms. (F,S)

SYD 4704 Seminar in Ethnicity (3). An upper-level seminar, stressing a comparative sociological approach to the study of two or more racial-ethnic groups. Emphasis on the interrelations of ethnic communities within the same society and the socio-political effects of these interrelations. Prerequisite: SYD 4700 or permission of the instructor. (S)

SYD 4801 Sociological. Theories of Gender (3). Examines theories of gender in classical and contemporary sociological theory. Prerequisites: SYA 4010 or permission of the instructor.

SYD 4802 Sociology of Sexual Minorities (3). Social construction and development of sexual and gender identities in Western societies and cross-culturally. Topics include various contemporary social issues regarding sexuality and minority status.

SYD 4810 Sociology of Gender (3). An examination of women's and men's roles, statuses, and life opportunities in society. Consideration of current theories of gender inequality. (S)

SYD 4820 Sociology of Men (3). Examines the nature of the social construction of male gender identity in American society. (F)

SYD 5045 Demographic Analysis (3). The study of the processes that determine the size and composition of human populations. Emphasis on demographic transition theory and the antecedents and consequences of differential growth rates throughout the world.

SYG 2000 Introduction to Sociology (3). This course introduces the sociological perspective and method, and the basic areas of sociological interest such as socialization, sex roles, social groups, race and ethnic relations, deviance and social control, social stratification, and urban life. (F,S,SS)

SYG 2010 Social Problems (3). An introduction to the concept of a social problem and the approaches used to understand more fully the total dimensions of some specific problems. Special emphasis is given to clarifying one's understanding of the underlying nature of selected social problems, an analysis of those aspects amenable to remedy, and an inventory of the knowledge and skills available. (F,S,SS)

SYG 3002 Basic Ideas of Sociology (3). The course introduces the student to the ideas of community, authority, status, alienation, and the sacred, as used in sociological literature. (F,S,SS)

SYG 3320 Social Deviancy (Deviant Behavior) (3). The study of behavior that counters the culturally accepted norms or regularities. The social implications of deviancy are reviewed, and theoretical formulations regarding deviant behavior are analyzed. (S,SS)

SYG 4003 Sociology through Film (3). Popular and documentary films as data for the analysis of various sociological problems. (F)

SYG 4060 Sociology of Sexuality (3). Applies sociological perspectives to sexual attitudes and behavior, examining various world cultures. Topics include premarital and extramarital sex, sexual orientation, and prostitution. (F,S)

SYO 3120 Marriage and the Family (3). An introduction to the intensive study of the kinship relationship of man known as family. The family is distinguished from other special units, and behavior variations of this special unit are analyzed and associated with special functions. Contemporary manifestations of the family and the dynamic changes indicated are considered. (F,S,SS)

SYO 3250 School and Society (3). A specialized course dealing with the place of schools (particularly public) in society, the import of social criteria for school personnel, and the influence of such criteria on educational processes within the school system (institution). (F)

SYO 3400 Medical Sociology (3). An introductory overview of the social facets of health, disease, illness, and the organization/delivery of medical care and health care. (F,S)

SYO 3401 Sociology of Health Behavior (3). Provides a sociological perspective on health behavior. Topics include health as a social construct; personal, familial, and social/cultural determinants of health behavior; and health care delivery.

SYO 4130 Comparative Family Systems (3). The study of family organization and function in selected major world cultures. Emphasis is given to the inter-relationships of the family, the economic system, urbanization, and human development.

SYO 4200 Sociology of Religion and Cults (3). The study of religion's institutions, their structure and function in various societies. Leadership qualities, participation, and practices, and the relationship of religious institutions to other social institutions are studied. (F)

SYO 4300 Political Sociology (3). The underlying social conditions of political order, political process, and political behavior are explored. Examples are drawn from empirical and theoretical studies of power, elites, social class and socialization. (S,SS)

SYO 4360 Industrial Sociology (3). Concentrated study of industrialization and the sociological theory involved. Manpower, unemployment, apprentice programs, and classificatory schemes are studied. (F)

SYO 4410 Sociology of Mental Illness (3). Contemporary issues in mental health and illness from a sociological perspective. Includes differential prevalence, health, and illness behaviors, organization of care, social policy, and social control. (F)

SYO 4420 Comparative Sociology of Health Care Systems (3). Health care policies, organization, and systems from a cross-national perspective, focusing on issues such as access, insurance, corporation, and spiraling costs. (S)

SYO 4530 Social Stratification (Mobility) (3). The study of society structured hierarchically with particular attention to the form and content of the various levels. Problems in the social order and differential human behaviors associated with stratification are analyzed. (S)

SYO 4571 The Problems of Bureaucracy in The Modern World (3). The course deals with the micro-sociological problems of the internal organization of bureaucracies; the relation between bureaucracy and personality; the macro-sociological problems of the emergence of the bureaucratic form; bureaucratization and contemporary life; general problems of affluence; meaningless activity; ways to beat the bureaucracy; and bureaucracy and atrocity. (S)

SYP 3000 The Individual in Society (3). Introduction to the study of the individual as a social being, with particular emphasis on man's social origins, human perceptions, and the interaction of the individual and the group within society. (F)

SYP 3300 Social Movements (3). The study of human behavior as found in relatively unstructured forms, such as crowds, riots, revivals, public opinion, social movements and fads. The interplay of such behavior and the rise of new norms and values is analyzed. (S)

SYP 3400 Social Change (3). The study of major shifts in focus for societies or culture, and the indicators associated with such changes. Particular attention is given to the development of industrial societies and the dynamics involved for nations emerging from various stages of 'underdevelopment. (S)

SYP 3520 Criminology (3). An introduction to the study of criminal behavior, its evidence in society, society's reaction to the subjects involved, and the current state of theoretical thought on causality and treatment. (F)

SYP 3530 Delinquency (3). An analysis of behavior which is extralegal, with major concentration on its appearance among young people (juveniles) and society's response. Particular emphasis is given to the dynamic thrusts being made in establishing juvenile rights as a distinct part of human or civil rights. (S)

SYP 4321 Mass Culture (3). Analysis of the social, political, and cultural impact of mass communications. (S)

SYP 4410 Social Conflict (3). The study of conflict in society and its place in social relationships. A study of causes and resolutions, with particular emphasis on methods of resolution and their influence on social change. (F)

SYP 4421 Man, Society, and Technology (3). The study of contemporary society, man's role in it, and effects of technological change. A study of interrelationships, with special attention given to vocational study and instruction within the framework of the relationships perceived. (S)

SYP 4441 Sociology of the Underprivileged Societies (3). An examination of the various theories concerning what is happening in the 'under-developed world.' The political, social, and economic events of these societies are subjected to sociological analysis.

SYP 4460 Sociology of Disasters (3). Study of human response to disaster events, including political and economic factors influencing vulnerability. Examines how individ-uals and institutions make decisions at all levels of disaster response.

SYP 4562 Domestic Violence (3). Applies sociological perspectives to the topic of domestic violence. Analyzes cultural roots and social structures that promote and reinforce violence in intimate relationships. Prerequisites: SYG 2000 or ANT 2000. (F)

SYP 4600 Sociology of Art and Literature (3). This course approaches the question of art and society through an analysis of: the social production of art; the relationship between imagination and society; the role of the artist; and the ideological impact of aesthetic theory.

SYP 4601 Symbols and Society (3). An analysis of the effect of culture on the individual and on society. The roles of popular and intellectual culture will be examined.

SYP 4730 Sociology of Aging (3). The social impact of aging on individual and group interaction patterns, particularly in the areas of retirement, family relations, community participation, and social services. Explores the major sociological theories of aging in light of current research. (F)

SYP 4733 Aging in the Black Community (3). Social and cultural issues related to aging among blacks in America. Includes the major areas of demography and epidemiology; biological and health status; and social and behavioral processes.

SYP 4740 Sociology of Death (3). An introduction to 'death' as social phenomenon. Attention given to various approaches which systematically study death, with primary emphasis given to the sociological approach. Major attention is given to an exploration of attitudes toward death, and an assessment of the implications for the respective groups involved.

Statistics

Jie Mi, *Associate Professor and Chairperson*
Carlos W. Brain, *Associate Professor*
Ling Chen, *Associate Professor*
Zhenmin Chen, *Associate Professor*
Gauri L. Ghai, *Associate Professor*
Sneh Gulati, *Associate Professor*
Ina Parks Howell, *Lecturer*
Jordan Neus, *Assistant Professor*
Laura Reisert, *Instructor*
Samuel S. Shapiro, *Professor*
Hassan Zahedi-Jasbi, *Associate Professor*
Jyoti N. Zalkikar, *Associate Professor*

Bachelor of Science in Statistics

Degree Program Hours: 120

Lower Division Preparation

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Common Prerequisites

MAC 2311	Calculus I
MAC 2312	Calculus II
COP 2210	Introduction to Programming
	or
CGS 2420	FORTRAN for Engineers
	or
COP 2400	Assembly Language Programming
	or
CGS 2423	C for Engineers

One of the following:

BSC 1010	General Biology I
BSC 1010L	General Biology Lab I
BSC 1011	General Biology II
BSC 1011L	General Biology Lab II
BSC 2023	Human Biology
BSC 2023L	Human Biology Lab
CHM 1032	Chemistry & Society
CHM 1032L	Chemistry & Society Lab
CHM 1033	Survey of Chemistry
CHM 1033L	Survey of Chemistry Lab
CHM 1045	General Chemistry I
CHM 1045L	General Chemistry Lab I
CHM 1046	General Chemistry II
CHM 1046L	General Chemistry Lab II
PHY 2048	Physics with Calculus I
PHY 2048L	General Physics Lab I
PHY 2049	Physics with Calculus II
PHY 2049L	General Physics Lab II

Courses required for the degree:

MAC 2313	Multivariable Calculus
MAS 3105	Linear Algebra

Upper Division Program

Required Courses: (33)

STA 3163	Statistical Methods I	3
STA 3164	Statistical Methods II	3
STA 4321	Introduction to Mathematical Statistics I	3
STA 4322	Introduction to Mathematical Statistics II	3
STA 4202	Introduction to Design of Experiments	3
STA 4234	Introduction to Regression Analysis	3
STA 4664	Statistical Quality Control	3
ENC 3211	Report & Technical Writing	3

Six additional credit hours of approved statistics courses 6

Three additional credit hours in an approved statistics, mathematics, or computer science course 3

A grade of 'C' or higher in each of these courses is necessary for the major.

Electives

The balance of the 120 semester hour requirement for graduation may be chosen from any courses in the University approved by the student's advisor.

Remarks: The student must consult his or her advisor to determine which courses, in addition to the required courses listed above, satisfy the requirements for a statistics major. The following courses are not acceptable for credit toward graduation, unless a student has passed the course before declaring a statistics major: MAC 2233, STA 1013, STA 2023, STA 3033, STA 3111, STA 3112, STA 2122, STA 3123, STA 3145 and QMB 3200 (College of Business Administration).

Minor in Statistics

Lower or Upper Division Preparation: (3 or 4)

STA 3111	Statistics I	4
	or	
STA 2122	Introduction to Statistics I	3
	or	
STA 2023	Statistics for Business and Economics	3
	or	
MAC 2312	Calculus II	4

Upper Division Program: (12)

Required Courses

STA 3163	Statistical Methods I	3
STA 3164	Statistical Methods II	3

Two additional courses from the following list:

STA 3033	Introduction to Probability and Statistics for CS	3
	or	
STA 4321	Introduction to Mathematical Statistics I[1]	3
STA 4322	Introduction to Mathematical Statistics II	3
STA 4202	Introduction to Design of Experiments	3
STA 4234	Introduction to Regression Analysis	3
STA 4502	Introduction to Nonparametric Methods	3
STA 4664	Statistical Quality Control	3

[1]STA 4321 has MAC 2313 as a prerequisite.

A grade of 'C' or higher in each of these courses is necessary for the minor.

Remarks: No courses in statistics, mathematics or computer sciences can be applied to more than one minor in these disciplines, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a course is required for both a major in one area and a minor in another, the student should see his or her advisor for an appropriate substitution for the requirement of the minor.

Certificate Program in Actuarial Studies

See section on certificate programs under College of Arts and Sciences.

Course Description

Definition of Prefixes

MAP - Mathematics, Applied; STA - Statistics.

MAP 5117 Mathematical and Statistical Modeling (3). Study of ecological, probabilistic, and various statistical models. Prerequisites: MAC 2313, COP 2210 or CGS 2420, MAS 3105; and STA 4322 or STA 3164 or STA 3033.

STA 1013 Statistics for Social Services (3). This is an elementary course in statistics, covering graphical and numerical condensation of data as well as the most basic parametric and non-parametric methods. Emphasis is placed on the interpretation of statistical results, rather than on ways to analyze experimental data. Prereq-

uisite: MAC 2132 or MGF 1202 or Junior standing. (F,S,SS)

STA 1061 Introduction to SPSSX for Data Analysis (1). Data coding and entry for use on the mainframe. How to input data, create variables, select subsets of data. Use procedures such as: LIST, FREQUENCIES, CROSSTABS, DESCRIPTIVES, MEANS and CORRELATIONS. Prerequisite: Basic Statistics, DCL and EDT.

STA 1062 Introduction to SAS for Data Analysis (1). Data coding for entry use on the mainframe. SAS Data step to input data, create variables, select subsets of data, PROCs such as: PRINT, FORMAT, MEANS, FREQ, SUMMARY, TEST, CORR, UNIVARIATE and PLOT. Prerequisite: Basic statjstics, DCL and EDT.

STA 2023 Statistics for Business and Economics (3). Starting with an introduction to probability, the course provides an introduction to statistical techniques used in management science. It includes descriptive statistics, probability distributions, estimation and testing of hypotheses. Subsequent credit for STA 2122 or STA 3111 will not be granted. Prerequisites: MAC 2132 or MGF 1202 or Junior standing. (F,S,SS)

STA 2122 Introduction to Statistics I (3). A course in descriptive and inferential statistics. Topics include: probability distribution of discrete and continuous random variables. Sampling distributions. Large sample estimation and hypothesis testing for means and proportions. Prerequisites: MAC 2132 or MGF 1202. (F,S,SS)

STA 3033 Introduction to Probability and Statistics for CS (3). Basic probability laws, probability distributions, basic sampling theory, point and interval estimation, tests of hypotheses, regression and correlation. Minitab will be used in the course. Prerequisite: MAC 2312. (F,S,SS)

STA 3060L Statistics Laboratory (1). A laboratory course designed to illustrate important statistical concepts through experiments. Data are analyzed using statistical software packages. Prerequisite or Corequisite: A statistics course.

STA 3111 Statistics I (4). Descriptive statistics, frequency distributions, probability distributions, point and interval estimation, hypothesis testing, one-way analysis of variance, correlation. Subsequent credit for STA 2122 or STA 2023 will not be granted. Prerequisite: MAC 2132 or MGF 1202 or Junior standing. (F,S,SS)

STA 3112 Statistics II (2). Analysis of variance, nonparametric methods, linear regression, analysis of categorical data. Computer software will be used. Subsequent credit for STA 3123 will not be granted. Prerequisite: STA 3111. (F,S,SS)

STA 3123 Introduction to Statistics II (4). Small sample statistical inference for means and variances. T, chi-square and F distributions. Analysis of variance, regression, correlation, basic nonparametric tests, goodness of fit tests and tests of independence. Prerequisites: STA 2122 or equivalent.

STA 3145- Statistics for the Health Professions (3). Statistical analysis with applications in the health sciences. Binomial and normal distributions. Inferences about means and proportions. Regression, correlation, goodness of fit tests. Prerequisites: MAC 2132 or MGF 1202 or Junior standing.

STA 3163-STA 3164 Statistical Methods I and II (3-3). This course presents tools for the analysis of data. Specific topics include: use of normal distribution, tests of means, variances and proportions; the analysis of variance and covariance (including contrasts and components of variance models), regression, correlation, sequential analysis, and non-parametric analysis. Prerequisite: MAC 2312 or a course in statistics. (F,S)

STA 3905 Independent Study (1-20). Individual conferences, assigned readings, and reports on independent investigations.

STA 3930 Special Topics (1-20). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

STA 3949 Cooperative Education in Statistics (1-3). One semester of either part-time or full-time work in an outside organization. Limited to students admitted to the Co-op program. A written report and supervisor evaluation are required of each student. Prerequisite: 2 courses in statistics and permission of Chairperson.

STA 4102 Introduction to Statistical Computing (3). Data manipulation and statistical procedures using popular software, simulation, and statistical algorithms. Prerequisites: STA 3164 or STA 3123 or STA 3112, and COP 2210 or CGS 2420.

STA 4173-HSC 4510 Statistical Applications in Health Care (3). A course in descriptive and inferential statistics for the Health Services. Topics include probability distributions, point and interval estimation, hypothesis testing, regression and correlation, and contingency table analysis. Prereq-uisite: STA 1013 or equivalent college mathematics course.

STA 4182 Statistical Models (3). This is a specialized course in the use of statistical models to represent physical and social phenomena. The emphasis is on providing tools which will allow a researcher or analyst to gain some insight into phenomena being studied. An introductory knowledge of probability theory and random variables is assumed. Specific topics include: introduction to discrete and continuous probability distributions, transformation of variables, approximation of data by empirical distributions, central limit theorem, propagation of moments, Monte Carlo simulation, probability plotting, testing distributional assumptions. Prereq-uisites: STA 3033 or STA 4321.

STA 4202 Introduction to Design of Experiments (3). Completely randomized, randomized block, Latin square, factorial, nested and related designs. Multiple comparisons. Credit will not be given for both STA 4202 and STA 5206. Prerequisite: STA 4322 or STA 3164 or STA 3033 or (STA 3163 and STA 4321).

STA 4321-STA 4322 Introduction to Mathematical Statistics I and II (3-3). This course presents an introduction to the mathematics underlying the concepts of statistical analysis. It is based on a solid grounding in probability theory, and requires a knowledge of single and multivariable calculus. Specific topics include the following: basic probability concepts, random variables, probability densities, expectations, moment generating functions, sampling distributions, decision theory, estimation, hypothesis testing (parametric and nonparametric), regression, analysis of variance, and design of experiments. Prerequisite: MAC 2313. (F,S)

STA 4234 Introduction to Regression Analysis (3). Multiple and polynomial regression, residual analysis, model identification and other related topics. Credit will not be given for both STA

4234 and STA 5236. Prerequisite: STA 3164 or STA 3123 or STA 3112.

STA 4502 Introduction to Nonparametric Methods (3). Sign, Mann-Whitney U, Wilcoxon signed rank, Kruskal-Wallis, Friedman and other distribution-free tests. Rank correlation, contingency tables and other related topics. Credit for both STA 4502 and STA 5505 will not be granted. Prerequisite: First course in statistics.

STA 4664 Statistical Quality Control (3). This course presents the simple but powerful statistical techniques employed by industry to improve product quality and to reduce the cost of scrap. The course includes the use and construction of control charts (means, percentages, number defectives, ranges) and acceptance sampling plans (single and double). Standard sampling techniques such as MIL STD plans will be reviewed. Prerequisite: Introductory course in statistics.

STA 4905 Independent Study (VAR). Individual conferences, assigned readings, and reports on independent investigations.

STA 4949 Cooperative Education in Statistics (1-3). One semester of either part-time or full-time work, in an outside organization. Limited to students admitted to the Co-op program. A written report and supervisor evaluation are required of each student. Prerequisite: STA 4322, STA 3164 and permission of Chairperson.

STA 5106 Intermediate Statistics I (3). Power, measures of assoc., measurement, ANOVA: one-way and factorial, between and within subjects expected mean squares, planned comparisons, a-priori contrasts, fixed, random, mixed models. This course may be of particular interest to behavioral sciences. Prerequisites: STA 3111 and graduate standing. (F)

STA 5107 Intermediate Statistics II (3). Correlation and regression both simple and multiple, general linear model, analysis of covariance, analysis of nominal data, analysis of categorical data. This course may be of particular interest to behavioral sciences. Prerequisite: Permission of the instructor. (S)

STA 5126-PSY 5206 Fundamentals of Design of Experiments (3). CRD and RCB designs. Latin square designs. Factorial, nested and nested-factorial experiments. Fixed, random and mixed models. Split-plot designs. Covariance analysis. Prerequisites: STA 3123 or STA 3112 or equivalent.

STA 5206 Design of Experiments I (3). Design and analysis of completely randomized, randomized block, Latin square, factorial, nested and related experiments. Multiple comparisons. Credit for both STA 4202 and STA 5206 will not be granted. Prerequisite: STA 4322 or STA 3164 or STA 3033 or (STA 3163 and STA 4321).

STA 5207 Topics in Design of Experiments (3). This applied course in design of experiments covers topics such as split-plot design, confounding, fractional replication, incomplete block designs, and response surface designs. Prerequisite: STA 5206.

STA 5236 Regression Analysis (3). Simple, multiple and polynomial regression, analysis of residuals, model building and other related topics. Credit for both STA 4234 and STA 5236 will not be granted. Prerequisites: STA 3164 or STA 3123 or STA 3112, or STA 6167.

STA 5446-STA 5447 Probability Theory I and II (3-3). This course is designed to acquaint the student with the basic fundamentals of probability theory. It reviews the basic foundations of probability theory, covering such topics as discrete probability spaces, random walk, Markov Chains (transition matrix and ergodic properties), strong laws of probability, convergence theorems, and law of iterated logarithm. Prerequisite: MAC 2313.

STA 5505 Nonparametric Methods (3). Distribution-free tests: sign, Mann-Whitney U, Wilcoxon signed rank, Kruskal-Wallis, Friedman, etc. Rank correlation, contingency tables and other related topics. Credit for both STA 4502 and STA 5505 will not be granted. Prerequisite: First course in statistics.

STA 5676 Reliability Engineering (3). The course material is designed to give the student a basic understanding of the statistical and mathematical techniques which are used in engineering reliability analysis. A review will be made of the basic fundamental statistical techniques required. Subjects covered include: distributions used in reliability (exponential, binomial, extreme value, etc.); tests of hypotheses of failure rates; prediction of component reliability; system reliability prediction; and reliability apportionment. Prerequisite: STA 4322.

STA 5800 Stochastic Processes for Engineers (3). Probability and conditional probability distributions of a random variable, bivariate probability distributions, multiple random variables, stationary processes, Poisson and normal processes. Prerequisites: STA 3033, MAC 2313, MAP 2302.

STA 5826 Stochastic Processes (3). This course is intended to provide the student with the basic concepts of stochastic processes, and the use of such techniques in the analysis of systems. Subjects include: Markov Processes, queuing theory, renewal processes, birth and death processes, Poisson and Normal processes. Applications to system reliability analysis, behavioral science, and natural sciences will be stressed. Prerequisite: STA 5447.

STA 5906 Independent Study (VAR). Individual conferences, assigned reading, and reports on independent investigation.

Theatre and Dance

Therald Todd, *Associate Professor*
Elizabeth Bergman, *Professor and Director of Dance*
Lee Brooke, *Associate Professor*
Joanne Brown, *Instructor*
Phillip Church, *Associate Professor*
Robert Jones, *Instructor*
Ellen Karsh, *Instructor*
Gary Lund, *Instructor*
Douglas Molash, *Assistant Professor*
Leslie Neal, *Associate Professor*
Wayne Robinson, *Assistant Professor*
Brian Schriner, *Instructor and Director of Forensics*
Andrea Seidel, *Associate Professor*
Marilyn Skow, *Associate Professor*
Leslie Ann Timlick, *Associate Professor*

Theatre Program

The goal of the theatre program is to provide intensive theatre training through classes and productions conducted with professional theatre discipline and the highest possible aesthetic standards. In addition to completion of course work, theatre majors are required to participate in all of the major productions presented while the student is enrolled in the Theatre Program.

Students will complete the core courses and select a specialization in either Acting or Production.

The degree requirements represent a four year program. Upper division transfers must have their lower division preparation evaluated by the department and will be advised accordingly.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. An audition and/or interview is required of all students entering the program.

Students for whom English is a second language must have a minimum TOEFL score of at least 550 plus an interview with department personnel to determine adequacy of English writing and speaking skills for the major.

Bachelor of Arts in Theatre

Degree Program Hours (120)

THE 1020	Freshman Theatre Seminar	3
THE 4110	Theatre History I	3
THE 4111	Theatre History II	3
THE 4370	Modern Dramatic Literature	3
THE 4930	Senior Seminar	2
THE 4972	Senior Thesis	1
TPA 2010	Introduction to Scenic and Lighting Design	3
TPA 2210	Stagecraft I	3
TPA 2248	Stage Makeup	3
TPA 2290L	Technical Theatre Lab I	1
TPA 2291L	Technical Theatre Lab II	1
TPA 2292L	Technical Theatre Lab III	1
TPA 3230	Stage Costuming	3
TPA 3293L	Technical Theatre Lab IV	1
TPP 1120	Introduction Performance Process: Improvisation	3
TPP 2110	Acting I	3
TPP 2510	Theatre Movement I	2
TPP 2710	Theatre Voice & Speech I	2
TPP 3310	Directing I	3
TPP 3650	Playscript Analysis	3

The student must also take a *Dramatic Literature Course* from the English or Modern Language Departments, as approved by an Advisor 3

Additional required courses:

TPP 2111	Acting II	3
TPP 3511	Theatre Movement II	2
TPP 3711	Theatre Voice and Speech II	2
	or	
TPA 3061	Approaches to Design for the Stage	3
TPA 3601	Stage Management	3
TPA 4400	Theatre Management	3

Bachelor of Fine Arts in Theatre

Degree Program Hours: 128

Performance Specialization (81)

THE 1020	Freshman Theatre Seminar	3
TPA 2010	Introduction to Scenic and Lighting Design	3
TPA 2210	Stagecraft I	3
TPA 2248	Stage Makeup	3
TPA 2290L	Technical Theatre Lab I	1
TPA 2291L	Technical Theatre Lab II	1
TPA 2292L	Technical Theatre Lab III	1
TPA 3230	Stage Costuming	3
TPA 3293L	Technical Theatre Lab IV	1
TPP 1120	Introduction Performance Process: Improvisation	3
TPP 2110	Acting I	3
TPP 2111	Acting II	3
TPP 2510	Theatre Movement I	2
TPP 2710	Theatre Voice & Speech I	2
TPP 3112	Acting III	3
TPP 3164	Theatre Voice and Movement III	3
TPP 3165	Theatre Voice and Movement IV	3
TPP 3310	Directing I	3
TPP 3511	Theatre Movement II	2
TPP 3650	Playscript Analysis	3
TPP 3711	Theatre Voice and Speech II	2
TPP 4114	Acting IV	3
TPP 4192	Advanced Rehearsal and Performance	3
TPP 4221	Audition Workshop for the Actor	3
TPP 4920	Advanced Actor's Workshop	3
THE 4110	Theatre History I	3
THE 4111	Theatre History II	3
THE 4370	Modern Dramatic Literature	3
THE 4930	Senior Seminar	2
THE 4970	Senior Project I	1
THE 4971	Senior Project II	1

The student must also take 4 credits of Dance Technique classes as approved by an Advisor

Additional required coureses:

MUN 2320	Women's Chorus	1
	or	
MUN 2330	Men's Chorus	1

Design Specialization (47)

THE 1020	Freshman Theatre Seminar	3
TPA 2010	Introduction to Scenic and Lighting Design	3
TPA 2210	Stagecraft I	3
TPA 2248	Stage Makeup	3
TPA 2290L	Technical Theatre Lab I	1
TPA 2291L	Technical Theatre Lab II	1
TPA 2292L	Technical Theatre Lab III	1
TPA 3061	Approaches to Design for the Stage	3
TPA 3230	Stage Costuming	3
TPA 3293L	Technical Theatre Lab IV	1
TPP 1120	Introduction Performance Process: Improvisation	3
TPP 2100	Introduction to Acting	3
TPP 3310	Directing I	3
TPP 3650	Playscript Analysis	3
THE 4110	Theatre History I	3
THE 4111	Theatre History II	3
THE 4370	Modern Dramatic Literature	3
THE 4930	Senior Seminar	2
THE 4970	Senior Project I	1
THE 4971	Senior Project II	1

Costume Specialization (38)

ART 2251	Art History Survey II	3
ART 3331	Figure Drawing	3
ART 3820	Visual Thinking	3
TPA 3040	Costume Design I	3

TPA 2220	Stage Lighting I	3
TPA 3930	Special Topics in Technical Production: Costume Patterning	3
TPA 4041	Costume Design II	3
THE 4916	Research : Portfolio	2
THE 4950	Internship	12

One elective course from the following, as approved by advisor:

ARH 3350	Baroque Art	3
ARH 4310	Early Italian Rennaissance	3
ARH 4312	Later Italian Rennaissance	3

Lighting Specialization (38)

TPA 3071	Stage Rendering	3
TPA 3060	Scenic Design I	3
TPA 3040	Costume Design I	3
TPA 2220	Stage Lighting I	3
TPA 3930	Special Topics in Technical Production: Drafting	3
TPA 4221	Stage Lighting II	3
THE 4916	Research : Portfolio	2
THE 4950	Internship	12

Two elective courses from the following, as approved by an advisor:

ART 1202	2D Design	3
ART 1203	3D Design	3
ART 3310	Drawing	3
ART 3820	Visual Thinking	3
ART 3830	Color Theory	3

Scenery Specialization (38)

ARH 2051	Art History Survey II	3
TPA 3060	Scenic Design I	3
TPA 3071	Stage Rendering	3
TPA 3930	Special Topics in Technical Production: Drafting	3
TPA 4061	Scenic Design II	3
THE 4916	Research: Portfolio	2
THE 4950	Internship	12

Two elective courses from the following, as approved by an advisor:

ARH 2050	Art History I	3
ART 1202	2D Design	3
ART 1203	3D Design	3
ART 3310	Drawing	3
ART 3331	Figure Drawing	3
ART 3820	Visual Thinking	3
ART 3830	Color Theory	3

Bachelor of Arts in Dance

Degree Program Hours: 120

The philosophy of the dance program is to provide the highest standards of academic and technical training while fostering individual creativity, intellectual growth and humanistic ideals to meet the challenges of the 21st Century in a multicultural society. The program offers a four year curriculum of comprehensive dance technique and theory classes, complemented by a secondary emphasis in a dance related field such as dance education, dance history, dance ethnology or preparation for advanced degree work in a selected area of dance such as dance therapy. The secondary emphasis is determined through faculty advisement. Upper division transfer students must have their lower division preparation evaluated by the department.

Students interested in majoring in dance and who meet the admission requirements of the University must take an audition class to be considered for admission as an intended major. An intermediate proficiency is required in one or more dance techniques to be fully admitted as a dance major. Students are evaluated during the first week of classes each term to determine appropriate technique level. In addition, all students applying for acceptance into the major must have met all lower division requirements including CLAST.

INDAMI - Intercultural Dance and Music Institute and the FIU Dance Ensemble-The Student Performance Group are based at the University Park Campus.

Required Courses: (55)

DAA 1200	Ballet Techniques I	2
DAA 1201	Ballet Techniques I-2	2
DAA 2204	Ballet Techniques II	2
DAA 2205	Ballet Techniques II-2	2
DAA 1100	Modern Dance Techniques I	2
DAA 1101	Modern Dance Techniques I-2	2
DAA 2104	Modern Dance Techniques II	2
DAA 2105	Modern Dance Techniques II-2	2
DAA 3208	Ballet Techniques III	3
	or	
DAA 3108	Modern Dance Techniques III	3
	or	
DAA 3394	Cultural Dance Forms[1]	2
DAA 3209	Ballet Techniques III-2	3
	or	
DAA 3109	Modern Dance Techniques III-2	3
	or	
DAA 3394	Cultural Dance Forms [1]	2
DAA 4210	Ballet Techniques IV	3
	or	
DAA 4110	Modern Dance Techniques IV	3
	or	
DAA 3394	Cultural Dance Forms[1]	2
DAA 4211	Ballet Techniques IV-2	3
	or	
DAA 4111	Modern Dance Techniques IV-2	3
	or	
DAA 3394	Cultural Dance Forms[1]	2
DAN 1600	Music for Dance	2
DAA 2610	Dance Composition I	2
DAN 3400	Laban Movement Analysis	2
DAA 3614	Dance Composition III	2
DAN 4134	Dance History I	3
DAN 4135	Dance History II	3
DAA 3654	Dance Repertory	2
DAN 4100	Dance Production	3
DAN 4970	Senior Thesis	2
DAN 4396	Dance Ethnology	
	or	
DAN 3394	Latin American and Caribbean Dance	3
	or	
DAN 4154	Dance Philosophy and Criticism	3

[1]*Note:* Cultural Dance Forms may be substituted two times or more, subject to advisement.

DAA 3615 Dance Composition IV now becomes an elective.

A grade of 'C' or higher is necessary in all required courses.

Specialization Electives: (min 12)

With Dance faculty advisor's approval the student will select electives which will prepare him/her for a career in a dance related field. The electives would constitute a specialization in the selected area. The exact number of credits needed to complete the specialization depends on the specialization, but the minimum allowed by the dance program is 12.

More credits may be necessary, depending on the nature of the specialization. Each student will receive individual advisement on specialization requirements.

Total credits for the major: 67

Minor in Dance

The Minor in Dance is designed to meet the needs of the Liberal Arts student who wants to pursue dance in order to increase his/her creative development and artistic awareness, and for those students who feel that dance is closely related to or an important extension or facet of their major discipline.

Requirements for Minor

Twenty credits minimum.
Fourteen credits in Dance Technique
Six credits in other Dance courses
Ten credits must be taken at FIU
Ten credits must be upper division

Minor in Theatre

Required Courses (24)

THE 2000	Theatre Appreciation	3
TPP 2100	Introduction to Acting	3
THE 4370	Modern Dramatic Literature	3
TPA 2210	Stagecraft	3
TPA 2290L	Tech Theatre Lab I	1
Theatre Electives (upper division)		11

Theatre minors will not be allowed to take TPP 2110 Acting I.

Course Descriptions

Definition of Prefixes

DAA-Dance Activities; DAN-Dance; ORI-Oral Interpretation; SPC-Speech Communication; THE-Theatre; TPA-Theatre Production and Administration; TPP-Theatre-Performance and Performance Training.

Dance Program

DAA 1100 Modern Dance Techniques I (2). Development of Techniques and understanding of the art form of contemporary dance. May be repeated.

DAA 1101 Modern Dance Techniques I-2 (2). A continuation of Modern Dance Techniques I with emphasis on vocabulary, movement, rhythm and alignment. May be repeated. Prerequisite: DAA 1100 or permission of the instructor.

DAA 1200 Ballet Techniques I (2). Development of Techniques and understanding of ballet. May be repeated.

DAA 1201 Ballet Techniques I-2 (2). A continuation of Ballet Techniques I with an emphasis on vocabulary, movement skill and alignment. May be repeated. Prerequisite: DAA 1200 or permission of the instructor.

DAA 1500 Jazz Dance Technique I (2). Development of the dance Techniques and understanding of jazz dance. May be repeated.

DAA 2104 Modern Dance Techniques II (2). A continuation of basic Techniques and understanding of the art form of contemporary dance. Prerequisite: DAA 1100 or permission of the instructor. May be repeated.

DAA 2105 Modern Dance Techniques II-2 (2). A continuation of Modern Dance Techniques II with further emphasis on style and phrasing. Prerequisite: DAA 2102 or permission of the instructor. May be repeated.

DAA 2204 Ballet Techniques II (2). A continuation of Ballet Techniques II with increasing complexity of combinations. Emphasis on correct execution of basics and musicality. May be repeated. Prerequisite: DAA 2202 or permission of the instructor.

DAA 2205 Ballet Techniques II-2 (2). A continuation of the basic Techniques and understanding of ballet. Prerequisite: DAA 2202 or permission of the instructor. May be repeated.

DAA 2350 Spanish Dance I (2). This course explores the basics of three theatre styles of Spanish dance.

DAA 2504 Jazz Dance Techniques II (2). A continuation of Jazz I with emphasis on quickness and musicality when executing complex combinations of movements.

DAA 2520 Tap (2). Designed for students interested in learning the skills and Techniques of tap dancing.

DAA 2610 Dance Composition I (2). A study of the principles of composition- emphasis on improvisation to explore structure and form in dance. Prerequisite: Permission of the instructor.

DAA 2611 Dance Composition II (2). A continuation of Composition I with an emphasis on exploring movement potential and structuring of dance forms. Prerequisite: DAA 2700 or permission of the instructor.

DAA 3108 Modern Dance Techniques III (3). A continuation of Modern Dance I and II with an emphasis on skills in movement style and phrasing necessary to perform modern dance repertory. Prerequisite: DAA 2102 or permission of the instructor.

DAA 3109 Modern Dance Techniques III-2 (3). A continuation of Modern Dance Techniques III with an emphasis on skills in movement style and phrasing necessary to perform modern dance repertory. Prerequisite: DAA 3104 or permission of the instructor.

DAA 3208 Ballet III (3). A continuation of Ballet I & II with an emphasis on developing strength & coordination in more complex movement. Additional work on phrasing, quality of movement, musicality and performance style. Prerequisite: DAA 2202 or permission of the instructor.

DAA 3209 Ballet Techniques III-2 (3). A continuation of Ballet Techniques III with an emphasis on strength and form. Introduction of pointe work. Center practice in balance, jumps, beats and turns. Prerequisite: DAA 3204 or permission of the instructor.

DAA 3224 Pointe Techniques (1-2). Introduction of fundamentals for development of pointe Techniques. May be repeated. Prerequisite: Permission of the instructor.

DAA 3354 Spanish Dance II (2). A continuation of Spanish Dance I stressing the development of musicality while working with a variety of basic rhythms. Arm and upper body strength and style will be emphasized as well as footwork techniques. Prerequisites: DAA 4362 or permission of the instructor.

DAA 3394 Cultural Dance Forms (2). An in-depth focus on specific cultural dance styles (Haitian, Afro-Cuban, etc.) to vary each semester. Studio course. May be repeated.

DAA 3508 Jazz Dance Techniques III (2). A continuation of jazz dance Techniques and skills with increased emphasis on developing complex dance combinations and full routines.

DAA 3614 Dance Composition III (2). A further exploration of choreography for the group form. Students will be required to take a concept and complete a work for showing and critique. Prerequisite: DAA 3701 or permission of the in-structor.

DAA 3654 Dance Repertory (2). The study and practice of works in repertory. May be repeated. Prerequisite: Permission of the instructor.

DAA 3655 Dance Repertory III (2). The continuation of study and practice of selected works of dance reportory. Prerequisite: Demonstration of competence is required.

DAA 3684 Dance Ensemble (1). An auditioned performing and production laboratory. Permission of the instructor.

DAA 4110 Modern Dance Techniques IV (3). Advanced modern dance Techniques with the major focus on dance as an art form using the body as a medium of expression. Prerequisite: DAA 3104 or permission of the instructor.

DAA 4111 Modern Dance Techniques IV-2 (3). A continuation of Modern Dance Techniques IV with the major emphasis on performance skills. Prerequisite: DAA 4106 or permission of the instructor.

DAA 4210 Ballet Techniques IV (3). Further development of strength and form with emphasis placed on perfecting the execution of the classical ballet Techniques. Prerequisite: DAA 3204 or permission of the instructor.

DAA 4211 Ballet Techniques IV-2 (3). A continuation of Ballet Techniques IV with an emphasis on developing individual performance styles. Prerequisite: DAA 4206 or permission of the instructor.

DAA 4356 Spanish Dance III (2). A continuation of Spanish Dance II, stressing the development of musicality while working with both basic and more complex flamenco rhythms. Elements of flamenco choreography are also explored. Prerequisite: DAA 4363.

DAA 4615 Dance Composition IV (2). Students work on extended choreographic projects with an eye toward developing material for their senior project. Prerequisite DAA 3702 or permission of the instructor.

DAA 4656 Dance Repertory IV (2). The continuation of study and practice of selected works of dance repertory. Prerequisite: Demonstration of competence is required.

DAA 4905 Directed Study (3-12). Individual study by students under the direction of a faculty member. Topics vary; they are usually selected on an individual basis.

DAA 4930 Special Topics (3-12). The course centers around topics of current interest or of special interest to students or instructors.. Topics vary from semester to semester.

DAN 1400 Movement Analysis (2). An introduction to movement analysis, Bartenieff fundamentals, Effort-Shape, and Labanotation.

DAN 1500 Dance Production I (2). This course prepares dancers for all aspects of dance concert production including lighting, costuming, props, set designs, budget management, and publicity.

DAN 1600 Music for Dance (2). The connection of musical structure and body movement will be explored in improvisational dance composition exercises. The basic elements of rhythm, tempo and meter will be studied.

DAN 2100 Introduction to Dance (3). An overview of dance from a variety of cultural and traditional perspectives. Through film, lecture, and movement, this course explores the diverse ways in which we organize and interpret our life experience as human beings through dance.

DAN 2160 Entry Seminar (1). An introductory course for those considring majoring in dance: an exploration of curricular requirements; courses; aesthetics; and other relevant topics.

DAN 3394 Latin American Caribbean Dance and Culture (3). Research, fieldwork, and studio practice related to the investigation of the dance and culture of Latin America and the Caribbean.

DAN 3504 Dance Production II (3). Continuation of theory and practice in elements of dance production.

DAN 3714 Kinesiology and Injury Prevention for Dance (3). A study of the body in motion. Students will apply their knowledge of anatomy to the moving dancer's body. Emphasis will be placed on alignment and correct body placement for injury prevention.

DAN 3724 Anatomy for Dance (3). An overview of the anatomy and physiology of the body explaining how certain anatomical structures and physiological processes interact to execute movement in a safe and effective manner.

DAN 3724L Anatomy for Dance Lab (1).

DAN 3774 Introduction to Dance/Movement Therapy (1-2). An introduction to the history, theory, and practice of Dance/Movement Therapy. Students learn how this medium can further the emotional, cognitive, and physical integration of the individual.

DAN 4134 Dance History I (3). An introduction to the history of non-western, cultural dance forms from tribal to modern.

DAN 4135 Dance History II (3). A survey of the development of dance in the West from Ancient Greece to present day. Prerequisite: DAN 4113 or permission of the instructor.

DAN 4154 Philosophy and Criticism of Dance (3). An exploration of the major philosophical and critical theories of the art of the dance within a broad socio-historical context.

DAN 4180 Senior Dance Seminar (1). Senior level course for dancemajors covering a wide variety of topics including careers, graduate study, self-evaluation and related topics.

DAN 4396 Dance Ethnology (3). A special topics course which will study a specific dance culture from an historical, sociological and anthropological viewpoint. Topic will vary from semester to semester.

DAN 4584 Production Practicum (1). Practical experience in dance production.

DAN 4905 Independent Study (3-12). Individual study by students under the direction of a faculty member. Topics vary; they are usually selected on an individual basis.

DAN 4910 Research (1-5). Supervised individual investigation of special research projects. Credit will vary with the nature and scope of the project. May be repeated.

DAN 4930 Special Topics (3-12). The course centers around topics of current interest or of special interest to students or instructors. Topics or focus may vary from semester to semester

DAN 4970 Senior Thesis (2). Preparation of a comprehensive final work in the student's area of emphasis under the direction of a faculty advisor. Prerequisite: Permission of the instructor, dance majors only.

DAN 5398 Latin American and Caribbean Dance and Culture (3). An intensive course offered through a Summer Institute focusing on Latin American and Caribbean dance and culture through seminars, performance techniques, and academic classes.

DAN 5399 Dance Ethnology (3). A special topics course which will study a specific dance culture from an historical, sociological and anthropological viewpoint. Topic will vary from semester to semester.

DAN 5905 Independent Study (3-12). Individual study by students under the direction of a faculty member. Topics vary; they are usually selected on an individual basis.

DAN 4930 Special Topics (3-12). The course centers around topics of current interest or of special interest to students or instructors. Topics or focus may vary from semester to semester

Speech Communication Program

COM 3410 Cultural Communication Patterns of Asia (3). Increases cultural awareness by contrasting and comparing communication patterns between Asian and Western cultures.

COM 3461 Intercultural/Interracial Communication (3). How people communicate cross-culturally, interculturally and intraculturally.

ORI 3000 Basic Oral Interpretation (3). Development of the voice as an instrument for expressive interpretation of literature.

ORI 3003 Intermediate Oral Interpretation (3). A continuation of the basic techniques of oral interpretation with emphasis on program development. Programs will include poetry, prose, and drama. Prerequisite: ORI 3000.

SPC 2016 Communication for Business (3). A communication course that emphasizes oral communication skills necessary for the business and professional communities. Concentration on interviewing, public speaking, problem-solving, and leadership skills.

SPC 2050 Voice and Diction (3). Effective voice production, articulation, acceptable pronunciation, accent reduction, intonation, rhythm and phrasing.

SPC 2600 Public Speaking (3). Study of the principles of ethical and effective public speaking, with practice in the construction and delivery of original speeches before an audience.

SPC 3210 Communication Theory (3). Comprehensive introduction to the study of human communication processes including verbal and nonverbal modalities. Key historical and contemporary definitions and concepts in communication theory are reviewed.

SPC 3301 Interpersonal Communication (3). Fundamental principles and terms of human communication study in the interpersonal context. Practical application of definitions, models, and communication rules and competence discussed with emphasis on a variety of relational stages and types.

SPC 3513 Argumentation and Debate (3). Lectures and activities concerned with audience-centered reasoning. Topics include: Nature of argument, analysis, reasoning, evidence, values, and building and refuting arguments. Prerequisite: SPC 2600 or permission of the instructor.

SPC 3514 Argumentation and Debate II (3). Study of all styles of formal and informal debate. Emphasis on construction and use of the brief, debate strategy and delivery. Prerequisites: SPC 2600, SPC 3513 and permission of the instructor.

SPC 4445 Corporate Communication Theory and Leadership Dynamics (3). Emphasis on oral communication and leadership skills that are essential for the business community.

Theatre Program

THE 1020 Freshman Theatre Seminar (3). An orientation to the study, theory, and practice of theatre for freshman theatre majors. It provides the foundation for theatre study at more advanced levels. Prerequisite: Permission of the instructor. (F)

THE 2000 Theatre Appreciation (3). A study of theatre: process and product, introducing the past of theatre, its literature and traditions; and the means by which theatre is produced: acting, directing and visual design. (F,S)

THE 2051 Children's Theatre (3). Techniques of selection, production, and performance of plays for children.

THE 2820 Creative Dramatics (3). The study of informal drama activity with children. Techniques of improvisation, sense recall, music, and movement are employed.

THE 4110 Theatre History I (3). The development of the theatre from its origins to the early 19th century. (F)

THE 4111 Theatre History II (3). The development of the theatre from early 19th century to the present. (S)

THE 4370 Modern Dramatic Literature (3). Intensive play reading and discussion from early modern through contemporary. (S)

THE 4916 Research (1-5). Supervised individual investigation of special research projects. Credit will vary with the nature and scope of the project. May be repeated.

THE 4930 Senior Seminar (2). Theories of theatre presentation. Reading, seminar presentations and discussions cover the theories of playwriting, dramatic forms, acting, directing, design and theatrical criticism. Prerequisite: Theatre major. (S)

THE 4950 Theatre Internship (1-15). Supervised internship in a professional company in acting, directing, stage management, design, technical theatre, or theatre management.

THE 4970 Senior Project I (1). Preparation of a final creative project in the student's area of emphasis under the direction of a department chairperson. Theatre majors only. Prerequisite: Permission of the instructor.

THE 4971 Senior Project II (1). Final preparation and performance or presentation of a creative project in the student's area of emphasis under the direction of a faculty advisor. Theatre majors only. Prerequisite: THE 4970.

THE 4972 Senior Thesis (1). Research and writing of a thesis dealing with an aspect of theatre history and/or theory. Prerequisite: Permission of the instructor.

TPA 2010 Introduction to Scenic and Lighting Design (3). An introduction to the creative process of bringing scenery and lighting to the stage. Includes script analysis and rendering techniques. Prerequisite: TPA 2210. (F)

TPA 2210 Stagecraft I (3). An introduction to construction Techniques used in stage. Direct experience with wood and metal working tools, blueprint reading, and various materials including wood, metal, plastics and fabrics. Lecture and laboratory. Prerequisite: Prior arrangement with advisor. (F,S)

TPA 2211 Stagecraft II (3). Advanced problems in the construction and movement of scenery, properties, and special effects. Prerequisite: TPA 3200.

TPA 2220 Stage Lighting (3). Familiarization with stage lighting equipment, purposes, and aesthetics of stage lighting; development of an approach to designing lighting; practical experience in the use of equipment. Lecture and laboratory.

TPA 2248 Stage Make-up (3). Facial analysis, color matching, makeup design and application techniques of makeup for the stage. Includes character analysis and history of makeup styles. Prerequisite: Permission of the instructor. (S)

TPA 2290L Technical Theatre Lab I (1). Supervised crew work in construction, painting, lighting, costuming, and running major productions. Required of Theatre majors. (F,S)

TPA 2291L Technical Theatre Lab II (1). Supervised crew work. Required of Theatre majors. (F,S)

TPA 2292L Technical Theatre Lab III (1). Supervised crew work. Required of Theatre majors. (F,S)

TPA 3040 Costume Design I (3). The theory and practice of designing stage costumes through play and character analysis, research, and translation of this information into effective stage costume designs. Prerequisite: TPA 3230. Corequisites: TPA 2291 or TPA 2292.

TPA 3060 Scenic Design I (3) Nontraditional approaches to the development of design elements for the stage. Prerequisite: TPA 3230.

TPA 3061 Approaches to Design for the Stage (3). Nontraditional approaches to the development of design elements for the stage. Prerequisites: TPA 3230, and TPA 2010.

TPA 3071 Stage Rendering (3). An introduction to the Techniques used in rendering scenery and costume design concepts. Recommended as preparation for TPA 3060 and TPA 4230.

TPA 3230 Stage Costuming (3). Costume history and costume construction techniques, as well as the basics of the design process, fabric identification, and manipulation. Corequisite: TPA 2290, 2291, 2292, or 3292. (F)

TPA 3293L Technical Theatre Lab IV (1). Supervised crew work. Required of Theatre majors. Prerequisite: TPA 2292L. (F,S)

TPA 3601 Stage Management (3). A practical course in the methods and procedures used by the stage manager. It includes the study of the working organizational function of the stage manager in theatre, dance, and other performance situations.

TPA 3930 Special Topics in Technical Production (1-3). Lecture-lab studies in particular areas of theatre production, one area per semester, including stage management, prop making, sound design, special effects.

TPA 4061 Scenic Design II (3). Advanced skills in setting the mood of, and creating movement through a theatrical space. Emphasis will be placed upon rendering Techniques and model making. Prerequisite: TPA 3060.

TPA 4041 Costume Design II (3). A continuation of Costume Design I, with increased emphasis on refining skills developed at first design level, plus developing a personal design style and more advanced construction skills. Prerequisite: TPA 3040.

TPA 4221 Stage Lighting II (3). Advance work in lighting of the stage. Emphasis is on practical training and experience through drafting of light plots accompanied by discussion and evaluation. Prerequisite: TPA 3220.

TPA 4400 Theatre Management (3). Survey of all aspects of theatre administration: budget planning and maintenance; public relations; box office and house management; unions and contracts.

TPA 5025 Performance Lighting (2). An introduction to lighting for entertainment art's performances such as those presented at theme parks, concerts and outdoor performances. Prerequisiste: Permission of graduate area advisor.

TPP 1120 Introduction to Performance: Improvisation (3). An introduction to the acting process using an improvisational approach. (S)

TPP 2100 Introduction to Acting (3). An introduction to the acting process. Self awareness, physical and vocal control, basic stage Techniques and beginning scene work will be studied. Intended for the student with little or no acting experience. (F,S)

TPP 2110 Acting I (3). Development and training of basic skills: use of self, stage terminology, stage voice and movement. Intended for the serious theatre student. Prerequisite: Permission of the instructor. Majors only. Corequsite: TPP 2510 and TPP 2710. (F)

TPP 2111 Acting II (3). Continuation of skills with emphasis on Stanislavski based technique, i.e., given circumstances and objectives. Through scenework students learn to analyze text and make discoveries through rehearsal. Prerequisite: TPP 2110 and TPP 3283 and permission of the instructor. Corequisite: TPP 3511 and TPP 3711. (S)

TPP 2192 Advanced Rehearsal and Performance (1). Exploration of the acting process through rehearsal and performance of a play. Prerequisite: Permission of the instructor.

TPP 2510 Theatre Movement I (2). A study of movement for the actor through improving the mind-body connection, alignment, relaxation, imagination, centering, flexibility and use of space. Corequisite: TPP 2110 and TPP 2710. (F)

TPP 2710 Theatre Voice and Speech I (2). Development of the vocal apparatus for wide range of performance demands. Alignment, relaxation, breathing, placement, resonance, range and emotional connection will be studied. Corequisite: TPP 2110 and TPP 2510. Prerequisite: TPP 1120 and permission of the instructor. (F)

TPP 3112 Acting III (3). Continuation of skills with emphasis on transformaitonal character choices. Through scenework students learn to apply what they've learned to several characters from contemporary playwrights. Prerequisites: TPP 2111 and permission of the instructor. Corequisite: TPP 3164. (F)

TPP 3164 Theatre Voice and Movement III (3). Laban, Feldenkrais, and Neutral Mask will be studied to improve self-use and body articulation. Emphasis on handling heightened texts such as Shakespeare. Prerequisites: TPP 3711, TPP 3511, audition for B.F.A. program. Corequisite: TPP 3112. (F)

TPP 3165 Theatre Speech and Movement IV (3). Character mask and period movement for more specific physical characterization study. The study of dialects and accents and vocal characterization. Prerequisites: TPP 3164. Corequisite: TPP 4114.

TPP 3304 Playscript Analysis (3). Detailed playscript examination for directors, actors and designers, focusing on identification of those elements upon which successful theatre production depends. (F)

TPP 3310 Directing (1). Basic principles of play direction; including problems of selecting, analyzing, casting, and rehearsing plays. Prerequisites: TPP 2111 and TPP 3650. (S)

TPP 3511 Theatre Movement II (2). A continuation of the work from Theatre Movement I with an emphasis on the physical approaches to creating a character. Prerequisite: TPP 2510.

Corequisite: TPP 2111 and TPP 3711. (S)

TPP 3711 Theatre Voice II (2). A continuation of the vocal development with more emphasis on text and standard speech. Phonetics will be explored to help reduce speech regionalisms. Prerequisite: TPP 2710, permission of the instructor. Corequisite: TPP 2111 and TPP 3511. (S)

TPP 3730 Dialects (3). A study of dialects common to western theatre.

TPP 3923 Musical Theatre Workshop I (3). An introduction to Musical Comedy performance: integration of the dramatic, musical and movement components will be studied through work on selected scenes.

TPP 4114 Acting IV (3). Continuation of the development and training of acting skills with emphasis on a variety of styles. Prerequisites: TPP 3112 and permission of the instructor. Corequisite: TPP 3165. (S)

TPP 4221 Audition Workshop for the Actor (3). Audition techniques through preparation and presentation of audition material. Includes an exploration of professional actor training and actor business protocol. Prerequisites: TPP 4114 or permission of the instructor.

TPP 4311 Directing II (3). A continued study of directing Techniques culminating in the preparation of a play for public performance. Prerequisite: TPP 3310.

TPP 4531 Stage Combat (3). A study of combat Techniques for the stage, including fencing, boxing, wrestling, and tumbling.

TPP 4600 Playwriting I (3). Study of the theory and principles of writing plays for the stage. Practice in writing either the short or long play. May be repeated.

TPP 4601 Playwriting II (3). A continuation of the study of the theory and principle of writing plays for the stage. Actual practice in writing plays. Prerequisite: TPP 4600.

TPP 4920 Advanced Actor's Workshop I (3). This course will concentrate on the acting demands of a specific period, style, genre, or playwright. Prerequisite: TPP 4114 or permission of the instructor.

Visual Arts

Carol Damian, *Associate Professor and Chair*
Tori Arpad, *Assistant Professor*
Ralph F. Buckley, *Associate Professor*
William Burke, *Professor*
James M. Couper III, *Professor*
Carol Damian, *Associate Professor*
Eduardo Del Valle, *Associate Professor*
Richard Duncan, *Associate Professor*
Mirta Gomez, *Associate Professor*
Ellen Jacobs, *Professor*
Clive King, *Professor*
Kate Kretz, *Assistant Professor*
William Maguire, *Professor*
Juan Martinez, *Associate Professor*
Dahlia Morgan, *Professor/Art Museum* Director
Manuel Torres, *Professor*
Barbara Watts, *Associate Professor*

Bachelor of Fine Arts

Degree Program Hours: 120

Lower Division Preparation

Common Prerequisites

ARH 2050	Art History Survey I
ARH 2051	Art History Survey II
ART 1202	2D Design
ART 1203	3D Design
ART 1300	Drawing I
ART 1301	Figure Drawing I

Completion of two of the following:

ART 1300	Drawing I
ART 1301	Figure Drawing I
ART 2110	Ceramics I
ART 2150	Jewelry and Metals
ART 2181	Glassblowing I
ART 2401	Printmaking I
ART 2510	Painting I
ART 2702	Sculpture I
ART 2761	Figure Sculpture I
PGY 2401	Photography I

Remarks: The student who does not have an A.A. degree or who lacks proficiency in required courses, or both, will be expected to take more than 60 semester hours to complete the bachelor's degree, or to make up courses at the lower division level.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Visual Arts Scholarships

All Visual Arts scholarships are awarded as a result of the faculty's Spring Review, usually in April. Students should contact the department at 348-2897 for information on procedures for participation in the Spring Review.

Upper Division Program (60)

Required Courses: (48)

ARH 4450	Modern Art	3
ARH 4470	Contemporary Art	3
ARH Elective (upper division)		6
Studio Major		15
ART 3820/3821	Visual Thinking I & II	6
ART Thesis	I & II	6
ART & ARH Electives outside Studio Concentration		12
Electives outside of major		9

Minor in Visual Arts

(18 semester hours)

ARH Elective (upper division)		3
ART 3310C	Drawing	3
	or	
ART 3331C	Figure Drawing II	3
ART Studio Electives *(upper division)*		12

Minor in Art History

(18 semester hours)

ARH 4450	Modern Art	3
ARH 4470	Contemporary Art	3
ART Studio Elective *(upper division*		3
ARH Electives *(upper division)*		9

Course Descriptions

Definition of Prefixes

ARH-Art History; ART-Art; PGY-Photography.

ARH 2050 Art History Survey I (3). A broad survey of the visual arts and architecture from the Paleolithic Period through the Middle Ages.

ARH 2051 Art History Survey II (3). A broad survey of the visual arts and architecture from the Renaissance through the Modern Age.

ARH 3210 Early Christian and Byzantine Art (3). The art of Byzantine Empire from the early Christian period and the foundation of Constantinople to the Ottoman conquest and afterward (300-1500 A.D.). Prerequisite: ARH 2050 or permission of the instructor.

ARH 3350 Baroque Art (3). European art of the 17th and early 18th centuries. Artists to be studied include Bernini, Caravaggio, Velasques, Vermeer, Rembrandt, Rubens, Poussin, La Tour, and Watteau. Prerequisite: ARH 2051.

ARH 3930 Special Topics in Art History (3). Rotating special topics in Art History. May be repeated with change of content. Prerequisites: ARH 2050 and ARH 2051 or permission of the instructor.

ARH 4014 History of Decorative Arts (3). A survey of the more important and influential periods in history in the production of ceramics, fabrics, glass, jewelry and silversmithing. Slides, lectures, student research.

ARH 4131 Greek Art (3). Lectures, slides, research. The Art of Greece from the Bronze Age through the Classical Period.

ARH 4151 Roman Art (3). Lectures, slides, research. The Art of Ancient Rome from the Early Iron Age through the Late Roman Empire.

ARH 4310 Early Italian Renaissance (3). Lectures, slides, research. From the origins of Italian Renaissance in the Late Gothic Period to the Early 15th Century.

ARH 4311 The Art of Venice: The Rise of a Mediterranean Superpower (3). Analysis of artistic aspects of Venice's growth to power. Emphasis on the church of St. Mark and the Venetian National Shrine.

ARH 4312 Later Italian Renaissance (3). Lectures, slides, research. The Art of Italy in the later 15th and 16th Century.

ARH 4400 Primitive Art (3). An introduction to the art of widely dissimilar groups from areas on the margin or beyond the cultural influences of Europe, the Near East, India, China, and Japan. Emphasis will be placed on African, Oceanic, and North American Indian Art.

ARH 4430 Art and Politics (3). An investigation into the interrelationship between art and political issues, with emphasis on the 19th and 20th centuries.

ARH 4431 19th Century Painting (3). A study of Neoclassicism, Romanticism, Realism, and Impressionism. Artists to be considered include David, Ingres, Gericault, Delacroix, Goya, Courbet, Manet, Degas, Monet, and Renoir.

ARH 4450 Modern Art (3). Lectures, films, slides. A survey of European and American Art from 1890-1945. ARH 2051, or permission of the instructor. Prerequisite: ARH 2051 or permission of the instructor.

ARH 4454 Post 1985 Art (3). Examines the changing roles of the arts within the current socio-political context of plurality, corporate sponsorship and mass communications.

ARH 4470 Contemporary Art (3). Lectures, slides, visitors and student research. A survey of art from 1945 to the present. Prerequisites: ARH 2051 or ARH 4450, or permission of the instructor.

ARH 4552 Art of China and Japan (3). An introduction to the art of China to the Ming Dynasty and of Japan through the 18th century. The emphasis will be on painting and sculpture, with some ceramics and architecture.

ARH 4610 American Art (3). A survey of American painting from the Colonial period to the eve of World War I. Artists to be studied include Copley, West, Cole, Whistler, Sargent, Homer, Henri, and Bellows.

ARH 4611 North American Indian Art (3). A survey of native North American art history with emphasis on the post-contact period. The arts of the far north, Northwest coast, southwest, plains and the eastern woodlands.

ARH 4650 Pre-Columbian Art (3). Slides, lectures, research. A survey of Pre-Colombian Art from approximately 2000 B.C. to 1500 A.D. of Mesoamerica. (Intermediate area from Honduras to Columbia and the Andes).

ARH 4652 Pre-Columbian Art of the Andes (3). A survey of Andean Pre-Colombian art and architecture. Basic characteristics of technique, style and iconography in relation to Andean socioeconomic and cultural patterns.

ARH 4655 Mesoamerican Art History (3). A survey of Mesoamerican pre-Columbian art and architecture from the Mexican and Mayan territories, 1500 BC to the Conquest.

ARH 4670 20th Century Latin American Art (3). Lectures, films, slides. The Art of Central, South America and the Caribbean of the Twentieth Century.

ARH 4672 A History of Cuban Art (3). A survey of the visual arts in Cuba (sculpture, painting, and prints) with emphasis in the 20th century.

ARH 4710 History of Photography (3). A chronological examination of the work of the world's most significant photographers, from photography's invention in the 1830's to the present.

ARH 4905 Directed Studies (1-6). A group of students, with the approval of the art faculty, may select a master teacher of theory, research or criticism in selected areas as film, painting, sculpture, architecture, crafts, art history, multi-media art, etc. Arrangements must be made at least a semester before course is offered. May be repeated.

ARH 4910 Research (1-6). Art history, criticism, and theory in areas not covered by the present program and which the student wishes to study. Prerequisite: Permission of the instructor. May be repeated.

ARH 4931 Women and Art (3). Women in the history of art; past, present and future. Slides, lectures, films, panels and discussions.

ARH 5796 Critical Studies in the Visual Arts (3). Introduction to the methods and concerns of recent art history. Discussion of students' work in context of the contemporary art world. Prerequisite: ARH 4450 and ARH 4470.

ARH 5897 Special Topics in Art History (3). Rotating special topics on the graduate level in art history. May be repeated with change of topic. Prerequisite: ARH 4450 and ARH 4470.

ARH 5907 Directed Studies (1-6). A group of students, with the approval of the art faculty, may select a master teacher of theory, research or criticism in selected areas as film, painting, sculpture, architecture, crafts, art history, multi-media art, etc. Arrangements must be made at least a semester before course is offered. May be repeated.

ARH 5913 Research (1-6). Art history, criticism, and theory in areas not covered by the present program and which the student wishes to study. Prerequisite: Permission of the instructor. May be repeated.

ART 1202C 2D Design (3). Studio course introducing the basic art elements such as line, value, and color to develop the students vocabulary and awareness of two-dimensional potential in various media.

ART 1203C 3D Design (3). Studio course introducing the basic elements inherent in three-dimensional works of art. Shape, mass, balance, proportion, and scale are elements which will be explored.

ART 2112C Ceramics I (3). A beginning course for art and non-art majors that introduces the fundamentals of throwing and glaze applications.

ART 2150C Jewelry and Metalwork I (3). Introduction to materials, equipment and basic procedures in making jewelry and holloware. Identification, application and maintenance of machines and handtools, safety procedures, cutting, soldering and finishing projects.

ART 2183C Glassblowing I (3). Introduction to glassblowing: Furnace and lampworking. History of glass as an art form. Materials, tools, techniques, utilizing glass. Maintenance of studio and tools and safety procedures.

ART 2300C Drawing I (3). An introduction to the fundamentals of drawing. The course equips the student with a variety of basic skills, approaches and concepts explored through a comprehensive range of medias.

ART 2301C Drawing II (3). The course is designed for the student who has acquired basic drawing skills. It strengthens technical and conceptual skills while introducing more experimental approaches. Modes of personal expression are also developed. Prerequisite: ART 2300C

ART 2330C Figure Drawing I (3). Drawing from model. Student will study gesture, movement, form, volume, light, and other varied media.

ART 2401C Printmaking I (3). Introduces the student to a number of processes. Explores primarily one of the following: etching, lighography or screen printing with excursions into relief collograph, montype and color as appropriate.

ART 2510C Painting I (3). Introduction to development of expression, through individual understanding of tools, materials, technique, perception and vocabulary of painting.

ART 2702C Sculpture I (3). Beginning sculpture students will be given assigned problems structured to study the forms in nature and the work of other sculptors.

ART 2761C Figure Sculpture I (3). Introduction to figure sculpture. Basic studio course involving the study and rendering of the human figure using clay as the primary medium.

ART 3110C Ceramics (3). A beginning course for art and non-art majors. Fundamentals of throwing, hand-building, and glaze application. May be repeated.

ART 3113C Ceramics II (3). Intermediate ceramics is designed for the student who has acquired the fundamental skills taught in basic ceramics. Projects are designed to advance technical skills and aesthetic growth. Prerequisite: ART 2112C

ART 3114C Ceramics III (3). Concentrates on the development of technical skills in relationship to personal vision, with a view towards a consistent body of work. Prerequisite: ART 3113C

ART 3115C Low Temperature Ceramics (3). An in-depth study of low-temperature clays and glazes, and exploration of a variety of glazing and firing techniques, including lustres, residual salt, raku, white and red earthenware, etc. Prerequisite: ART 3110C.

ART 3151C Jewelry and Metalwork II (3). Basic metal fabrication techniques, use and maintenance of tools & equipment. Intermediate soldering, forming, finishing, forging, stone setting, raising, reticulation, fusing, & safety procedures. Prerequisite: Jewelry and Metalwork I or permission of the instructor.

ART 3152C Jewelry and Metalwork III (3). Continuation of Jewelry and metalsmithing techniques: soldering, stine setting, forging, forming, casting, raising, shell forming, enameling, fold forming and finishing. Prerequisite: Jewelry and Metalworks II or permission of the instructor.

ART 3184C Glassblowing II (3). Glassblowing: Furnace and/or lampworking, history of glass as an art form, maintenance of studio & tools and safety procedures. Prerequisite: Glassblowing I or permission of the instructor.

ART 3186C Glassblowing III (3). Intermediate Glassblowing: Furnace and/or lampworking, fusing, slumping, enameling, copper foiling, maintenance of studio and tools, and safety procedures. Prerequsite: Glassblowing II and/or permission of the instructor.

ART 3310C Drawing (3). Drawing will be considered as an essential part of every art student's curriculum. Depending on his lower level work, a student will be encouraged to take at least one drawing course at the University. Off-campus studio work may be arranged. May be repeated.

ART 3312C Drawing III (3). Students at this level should have a proficient level of practice and conceptual skills. These skills are consolidated and further developed. There is a strong emphasis on self-directed study. Prerequisite: ART 3302C.

ART 3331C Figure Drawing II (3). Exploration of the live human figure as it determines our understanding of subject, theme, composition and meaning. Prerequisite: ART 2330C.

ART 3332C Figure Drawing III (3). Further exploration of the live human figure as it determines our understanding of subject, theme, composition and meaning. Prerequisite: ART 3331C.

ART 3402C Printmaking II (3). With a knowledge of basic intaglio and relief printing, the student will explore specific media such as etching, lithography, silk-screen and other experimental techniques.

ART Printmaking III (3). Exploration and expansion of experimental print processes as they relate to student's own imagery and acquired skills. Greater independence and personal direction. Prerequisite: ART 3402C.

ART 3520C Painting II (3). Intermediate painting requiring refinement of technique and personal expression. Frequent critiques of student work. Prerequisite: ART 2510C.

ART 3521C Painting III (3). Intermediate painting requiring further refinement of technical skill and personal expression. Frequent critiques of student work. Prerequisite: ART 3511C.

ART 3702C Sculpture II (3). Intermediate sculpture is structured for the student who has acquired basic skills and is ready to test their creative abilities through individualized projects. Prerequisite: ART 2702.

ART 3703C Sculpture III (3). This class is an extension of ART 3703. Students are expected to continue to develop and explore new ideas. Prerequisite: ART 3703C.

ART 3762C Figure Sculpture II (3). A basic sculpture class emphasizing anatomical study with 2 and 3 dimensional rendering in clay, training the student to observe and accurately model the human figure. Prerequisite: Figure Sculpture I or permission of the instructor.

ART 3763C Figure Sculpture III (3) Intermediate figure sculpture where students refine their 2 and 3 dimensional renderings of the human figure. Prerequisite: Sculpture I and II or the permission of the instructor.

ART 3809 Performance Art (3). A workshop on the history and practice of performance art for the fine arts student. Focus on intersections with other visual arts media and social contexts. Not a course in dance, music or theater.

ART 3820 Visual Thinking I (3). A beginning studio-based course with a strong theoretical component where concepts are examined through a variety of approaches and media.

ART 3821 Visual Thinking II (3). An advanced studio-based course with a strong theoretical component where concepts are examined through a variety of approaches and media. Prerequisite: ART 3820.

ART 3830C Color Theory (3). This course is designed to familiarize the student with the theory and principles of color as it relates to the arts. Lecture, demonstration, and application through assigned projects will be included.

ART 3831C Materials and Techniques (3). Instruction in the craft of painting. Demonstration and exercise in the following will be included: color, pigments, ground, all major media, studio and equipment.

ART 3930 Special Topics in Studio Art (3). Rotating special topics in Studio Art. May be repeated with change of content.

ART 3949C Cooperative Education in Visual Arts (3). A student majoring in Visual Arts may spend several semesters fully employed in industry in a capacity relating to the major. Prerequisite: Permission of chairperson.

ART 4114C Ceramics (3). The advanced student will explore all aspects of expression in clay and glaze. Students will be expected to be mostly self-directed. Prerequisite: ART 3110C, or permission of the instructor. May be repeated.

ART 4115C Ceramics IV (3). Focuses on the development of a well produced, accomplished body of work that reflects the individual's ideas. Prerequisite: ART 3114C.

ART 4116C Ceramics V (3). Concentrates on a single ongoing project personally defined by the student and explored within the larger context of art history and contemporary society. Prerequisite: ART 4115C.

ART 4117C Ceramics VI (3). Concentrates on further refinement of technical skills, development of a consistent and cohesive body of work and a clear articulation of artistic conception. Prerequisite: ART 4116C.

ART 4151C Jewelry and Metals (3). See ART 2150C.

ART 4153C Jewelry and Metalwork IV (3). Advanced level work: enamel, raising, shell forming, granulation, niello, mokume, keumboo, reticulation, stone setting. Prerequsite: Jewelry II and III.

ART 4154C Jewelry and Metalwork V (3). Advanced level work and advanced techniques: enamel, raising, shell forming, fold forming, granulation, niello, mokume, keumboo, reticulation, and stone setting. Prerequisite: Jewelry III and IV.

ART 4156C Jewelry and Metalwork VI (3). Pre-thesis, in-depth study in some area related to metalsmithing. Projects may include work for a commission, exhibition or developing new techniques/design concepts. Participation in BFA show. Prerequisite: Jewelry and Metalwork I, II, III.

ART 4184C Glassblowing (3). See ART 3183C.

ART 4187C Glassblowing IV (3). Advanced Glassblowing: Furnace and/or lampworking, fusing, slumping, enameling, engraving, carving, copper foiling, casting. Maintenance fo studio tools and safety procedures. Prerequisite: Glassblowing II and III or permission of the instructor.

ART 4188C Glassblowing V (3). Advance Glassblowing Continued: Furnace and/or lampworking, fusing, slumping, enameling, engraving, carving, copper foiling, casting. Maintenance of studio and tools. Safety procedures. Prerequisite: Glassblowing IV

ART 4189C Glassblowing VI (3). Pre-thesis glassblowing. Student produces coherent body of work suitable for exhibition. Prerequsite: Glassblowing IV and V.

ART 4313C Drawing IV (3). Students are expected to possess an accomplished level of skill and a strong personal direction in order to focus on the development of a consistent body of personal work.

ART 4314C Drawing V (3). Advanced drawing toward coherent body of work. (See ART 4304).

ART 4315C Drawing VI (3). Drawing has to be BFA exhibition quality. Individual is engaged in a mature cohesive body of work. Prerequisite: ART 4305C.

ART 4320C Drawing (3). See ART 3310C.

ART 4332C Figure Drawing (3). See ART 3331C.

ART 4333C Figure Drawing IV (3). Students are expected to possess a developed level of skill in drawing the figure and a strong personal direction. Prerequisite: ART 3332C.

ART 4334C Figure Drawing V (3). Consolidation of the focus direction established in ART 4333C. Advanced drawing further developing technical and conceptual skills. Prerequisite: ART 4333C.

ART 4335C Figure Drawing VI (3). Work produced at the pre-BFA exhibition level. A strong cohesive body of figure drawings executed with a clear personal vision. Prerequisite: ART 4334C.

ART 4402C Printmaking (3). See ART 2401C.

ART 4403C Printmaking IV (3). Instructional emphasis will be toward individual solutions. Student expected to independently research technical problems. Prerequisite: ART 3403C.

ART 4404C Printmaking V (3). Student must be showing independence in initiating and executing projects. Self motivation, energy and purpose should be the focus. Prerequisite: ART 4404C.

ART 4405C Printmaking VI (3). Student should produce BFA exhibition work. (See ART 4405). Prerequisite: ART 4405.

ART 4522C Painting IV (3). Advanced painting with expectation of highly skilled technique and carefully evolved concerns that might continue into subsequent semesters. Prerequisite: ART 3512C.

ART 4523C Painting V (3). Advanced painting toward coherent body of work. Prerequisite: ART 4513C.

ART 4524C Painting VI (3). Advanced painting. BFA exhibition quality body of work expected at this level. (See ART 4513C.)

ART 4532C Painting (3). An advanced course concentrating on conceptual clarity and the realization of stylistic development. Group, individual criticism will be emphasized. May be repeated. Prerequisites: ART 2510C or equivalent. Suggested prerequisites: ART 3831C and ART 3803C.

ART 4681 Time Arts (3). An introduction to electronic media for the first arts student. Computer and video as tools for the artmaking process. Not a course in programming or commercial computer graphics.

ART 4703C Sculpture (3). See ART 2702C.

ART 4710C Figure Sculpture (3). To develop skills in representational structure and anatomy from the model and learn mold-making techniques. May be repeated.

ART 4740C Sculpture IV (3). First of a series of advanced classes which represent the beginning of a serious aesthetic commitment leading to a BFA degree. Prerequisite: ART 3704C.

ART 4741C Sculpture V (3). This class is an extension of ART 4705 and should be used to further advance previous efforts with the intention of producing major finished works. Prerequisite: ART 4705C.

ART 4742C Sculpture VI (3). The goal of this class is to bring fully developed ideas to a finished state in preparation for BFA thesis exhibition. Prerequisite: ART 4706C.

ART 4764C Figure Sculpture IV (3). Advanced figure sculpture. Students develop skills in representational structure and anatomy from model and model-making techniques. Prerequisite: Figure Sculpture II and III or the permission of the instructor.

ART 4765C Figure Sculpture V (3). Advanced figure sculpture continued. Student refines skills in representational structure and anatomy from model and mold-making techniques. Prerequisite: Figure Sculpture III and IV or the permission of the instructor.

ART 4766C Figure Sculpture VI (3). Pre-thesis sculpture where students have refined their work to produce B.F.A. exhibition body of work. Prerequisite: Figure Sculpture V.

ART 4832L Art Gallery and Display (1-3). The study and participation of all aspects of Gallery operations, from daily operation to special exhibitions and events. Permission of Gallery Director.

ART 4906C Directed Study (VAR). A group of students, with the approval of the Visual Arts Department faculty, may select a master artist teacher and pursue a course of art study in selected areas such as graphic design, film, multi-media, environmental design, sound, etc. Arrangements must be made at least one semester before course is offered. May be repeated.

ART 4910C Research (1-6). Students may study or research an individual art project with an art faculty member. Complexity and amount of work will determine the number of credit hours granted. May be repeated.

ART 4949C Cooperative Education in Visual Arts (3). See ART 3949C.

ART 4952C Thesis I. The course will expose students to fundamental issues and ideas current in the field of art. An inquiry into the structure of art and its relationship to society, knowledge, and the self. Prerequisite: 15-18 hours of Studio Major and permission of the instructor (portfolio review).

ART 4953C Thesis II (3). Studio work in student's major area with major professor, resulting in a student exhibit. Arrangements with major professor one semester before graduation. Written thesis required. Prerequisite: 15 semester hours of studio major and permission of the instructor (portfolio review). (Fall and Spring only). ART 4970C.

ART 5125C Ceramics (3). The advanced student will explore all aspects of expression in clay and glaze. Students will be expected to be mostly self-directed. Prerequisite: ART 3110C, or permission of the instructor. May be repeated.

ART 5159C Jewelry and Metals (3). Advanced jewelry & metalwork for M.S. in Art Education students. May be repeated. Prerequisite: Jewelry and Metalwork IV or equivalent or permission of the instructor.

ART 5185C Glassblowing (3). Advanced glassblowing for M.S. in Art Education students. May be repeated. Prerequisite: Glassblowing IV or equivalent or permission of the instructor.

ART 5340C Drawing (3). Advanced drawing for M.S. in Art Education students. May be repeated. Prerequisites: ART 4304C, or equivalent, or permission of the instructor.

ART 5341C Figure Drawing (3). Advanced figure drawing for M.S. in Art Education students. May be repeated. Prerequisites: ART 4333C, or equivalent, or permission of the instructor.

ART 5406C Printmaking (3). Advanced printmaking for M.S. in Art Education students. May be repeated. Prerequisites: ART 4404C, or equivalent or permission of the instructor.

ART 5580C Painting (3). Advanced painting for M.S. in Art Education students. May be repeated. Prerequisites: ART 4513 or equivalent, or permission of the instructor.

ART 5730C Sculpture (3). Advanced sculpture for M.S. in Art Education students. May be repeated. Prerequisites: ART 4705C or equivalent, or permission of the instructor.

ART 5768C Figure Sculpture (3). Advanced figure sculpture for M.S. in Art Education students. May be repeated. Prerequisite: Figure Sculpture IV or permission of the instructure.

ART 5907C Directed Study (VAR). A group of students, with the approval of the Visual Arts Department faculty, may select a master artist teacher and pursue a course of art study in selected areas such as graphic design, film, multi-media, environmental design, sound, etc. Arrangements must be made at least one semester before course is offered. May be repeated.

ART 5910C Research (1-6). Students may study or research an individual art project with an art faculty member. Complexity and amount of work will determine the number of credit hours granted. May be repeated.

ART 5938C Studio Art Pedagogy (1). Instruction in the principles and methods of teaching in the area of visual arts; specifically the application of these principles to the studio situation. Prerequisite: Graduate standing.

ART 5939C Studio Art Seminar (3). Students will locate and discuss their own work within the context of the contemporary art world. Also, issues and practical concerns for the professional artist will be addressed, such as dealing with galleries, grant writing and business procedures. Prerequisite: Issues of Contemporary Art Seminar.

PGY 3020 Introduction to Film-Making (3). For the beginning student of film making. Survey of the origins and development of cinematography as an art form. Presentation and technical analysis of selected films.

PGY 2110C Color Photography I (3). An introduction to color materials and processing. Frequent critiques of students' work. Prerequisites: PGY 3401C and PGY 4420C or permission of the instructor.

PGY 3311C Color Photography II & III (3). Intermediate color photography requiring refinement of technique and personal vision. Frequent critiques. Prerequisite: PGY 2110C.

PGY 2401C Photography I (3). Introduction to the practice of still photography. Includes darkroom work and camera skills. Frequent critiques of student work.

PGY 3410C Photography II & III (3). Intermediate photography requiring refinement of technical skills and personal vision. Frequent critiques. Prerequisite: PGY 2400C.

PGY 4112C Color Photography IV, V, & VI (3). Advanced color photography with an expectation of highly skilled technical and carefully evolved concerns that may continue in subsequent semesters. Prerequisite: PGY 3311C.

PGY 4420C Photography IV, V, & VI (3). Advanced photography with the expectation of highly skilled technique and a carefully evolved project that might continue into subsequent semesters. Prerequisite: PGY 3402C.

PGY 5114C Color Photography (3). Advanced color photography for MS in Art Education students. (See PGY 4113). Prerequisite: PGY 4113C.

PGY 5425C Photography (3). Advanced photography for M.S. in Art Education students. May be repeated. Prerequisite: PGY 4003C, or equivalent, or permission of the instructor.

Women's Studies

Marilyn Hoder-Salmon, *Associate Professor English and Director*
Lois West, *Associate Professor, Women's Studies and Sociology*
Affiliated Faculty:
Dawn Addy, *Center for Labor Research and Studies*
Janice Allen-Kelsey, *Sociology/Anthropology*
Irma de Alonso, *Economics*
Joan Baker, *English*
Pascale Becel, *Modern Languages*
Michelle Beer, *Philosophy*
Glenda Belote, *Undergraduate Studies*
Lisa Blansett, *English*
Janet Chernela, *Sociology/ Anthropology*
Alice Clarke, *Environmental Studies*
Carol Damian, *Visual Arts*
Carole Boyce Davies, *African New World Studies*
Mary Jane Elkins, *English*
Evelyn Enrione, *Dietetics and Nutrition*
Nadine Fernandez, *Sociology/ Anthropology*
Karen Garner, *Women's Center*
Valerie George, *Dietetics and Nutrition*
Maria Asuncion Gomez, *Modern Languages*
Christine Gudorf, *Religious Studies*
Tometro Hopkins, *English*
Rosa Jones, *Social Work*
Ken Johnson, *English*
Sherry Johnson, *History*
Lilly Langer, *Sociology/Anthropology*
Abe Lavender, *Sociology/ Anthropology*
Mary Levitt, *Psychology*
Kathleen McCormack, *English*
Kathleen Martin, *Sociology/ Anthropology*
Carmen Mendez, *Education*
Betty Morrow, *Sociology/ Anthropology*
Lesley Northup, *Religious Studies*
Joyce Peterson, *History*
Eleanor Polster, *Management*
Elisabeth Prugl, *International Relations*
Meri-Jane Rochelson, *English*
Rebecca Salokar, *Political Science*
Regina Shearn, *Criminal Justice*
Ellen Sprechman, *English*
Betsy Smith, *Social Work*
Judith Stiehm, *Political Science*
Linda Strong-Leek, *English*
John Stuart, *Architecture*
Susan Waltz, *International Relations*
Barbara Weitz, *English*
Margaret Wilson, *Center for Labor Research and Studies*
Kirsten Wood, *History*

Bachelor of Arts in Women's Studies

This major provides an opportunity for the study of the historical, political, economic, literary, social, and cultural roles of women and of the function of gender in diverse societies and cultures. The courses are coordinated by the Women's Studies Center, and are open to women and men alike, as a balance to traditional education. Through this rich discipline, bias throughout society- in the workplace, in school, and at home - is analyzed through historical study and new theory. Equal importance is given to the commitment to discover and teach ideas and knowledge about global concerns, nationality, race, ethnicity, class, age, and sexual identity. Students may formulate a program of study consonant with their interests and goals. The major is excellent preparation for graduate study in most fields and for careers in both the public and private sectors. A background in women's studies develops critical skills and offers new knowledge to meet the challenges of alterations in society and of expanding opportunities.

For further information and/or to seek academic advising for the women's studies major visit the Women's Studies Center in DM-212 or call (305) 348-2408. At North Campus, students may inquire at ACI 318 or call (305) 919-5859. We welcome your inquiry.

Lower Division Preparation

To qualify for admission to the program FIU undergraduates must have met all the lower division requirements including CLAST or its equivalent; completed 60 semester hours, and be otherwise acceptable into the program.

Upper Division Program

The major requires 30 hours of upper division course work. Students who elect to major in women's studies are required to declare a minor in another area of concentration (courses may overlap). Students who choose to declare a double major are exempt from the minor requirement. The major requires a core concentration of four courses and six electives for a total of 10 courses. Any core concentration course that is not taken for the core requirement, may be taken as an elective. Refer to full course descriptions in the appropriate departmental listings of this catalog. Genre and topic courses are offered regularly and new courses are periodically added to the curriculum. The elective selection may include one course on ethnicity, class or race. Student programs are coordinated with designated faculty advisors. The program also offers an academic certificate in women's studies. For further information refer to the certificate page at the end of the College of Arts and Sciences section.

Upper Division Requirements

Core Concentration: (Four courses; twelve hours/one course from each category)

WST 3010	Introduction to Women's Studies	3
	or	
HUM 3930	Female/Male: Women's Studies Seminar	3
SOP 3742	Psychology of Women	3
	or	
SYD 4810	Sociology of Gender	3
	or	
WST 4344	Feminist Theory	3
AMH 4560	History of Women in the U.S.	3
ANT 3302	Male and Female: Sex Roles and Sexuality	3
	or	
AMH 4560	History of Women in the U.S.	3
	or	
EUH 4610	Women and Gender in Europe, 1750 to Present	3
REL 3145	Women and Religion	3
	or	
LIT 3383	Women in Literature *(or any English elective listed below)*	3
	or	
PHM 4123	Philosophy and Feminism	3

Electives in Women's Studies

(Six courses: 18 hours; all are 3 credit hour)

Economics:	
ECS 3021	Women, Culture and Economic Development
English:	
AML 4624	African-American Women Writers
ENL 3261	19th Century British Women Novelists
ENL 4134	Women in Film
ENL 4212	Women in Medieval Literature
ENL 4370	Virginia Woolf and Her Circle
LIN 4651	Gender and Language
LIT 3383	Women in Literature

LIT 3384	Caribbean Women Writers
LIT 4931	Special Topics in Women's Literature

History:

AMH 4560	History of Women in the United States
EUH 4610	Women and Gender in Europe, 1750 to Present
LAH 4721	History of Women in Latin America

Humanities:

HUM 3225	Women, Culture and History
HUM 3930	Female/Male: Women's Studies Seminar

Interdisciplinary Studies:

WST 3381	Gay and Lesbians in the U.S.
WST 3010	Introduction to Women's Studies
WST 4344	Feminist Theory

Labor Studies:

LBS 4210	Women and Work in the United States

Modern Languages:

FRW 4583	Women Writers in French

Philosophy:

PHM 4123	Philosophy and Feminism

Religion:

REL 3145	Women and Religion
REL 3172	Reproductive Ethics
REL 3178	Christian Sexual Ethics
REL 4146	Feminist Theology and Ethics

Political Science:

POS 4605	Gender Justice and the Courts
POS 4627	Equality and the Constitution
POT 4309	Sex, Power, and Politics
PUP 4323	Women in Politics

Psychology:

SOP 3742	Psychology of Women

Sociology/Anthropology:

ANT 3302	Male and Female: Sex Roles and Sexuality
ANT 3304	Voices of Third World Women
ANT 4334	Contemporary Latin American Women
SYD 4801	Theories of Gender
SYD 4810	Sociology of Gender
SYD 4820	Sociology of Men
SYG 4060	Sociology of Sexuality
SYO 3120	Marriage and the Family
SYP 4562	Domestic Violence

Visual Arts:

ARH 4931	Women in Art

Architecture:

ARC 4xxx	Gender and Architecture

Business:

MAN 4102	Women and Men in Management

Criminal Justice:

CCJ 4663	Women, Crime, and the Criminal Justice System

Dietetics and Nutrition:

HUN 3294	Women's Nutrition Issues
HSC 3579	Wellness of Women

Course Descriptions

WST 3010 Introduction to Women's Studies (3). Considers the interdisciplinary study of American women in today's world. Focuses on women through the life course and examines the debates on women's studies in the university.

WST 3381 Gay and Lesbian in the United States (3). An interdisciplinary examination of contemporary issues facing gays and lesbians in the United States. Topics include a review of significant events in the gay/lesbian movement; political and legal considerations; and social/cultural contributions.

WST 4344 Feminist Theory (3). This course explores how women are viewed theoretically across the social sciences and humanities. Topics, such as multiculturism, cross-nationalism and post-modernism, are addressed.

Certificate Programs

Certificate in Actuarial Studies

Coordinating Committee

Hassan Zahedi, *Director, (Statistics)*
Steve Hudson, *(Mathematics)*
James F. Slifker, *(Mathematics)*

The Certificate in Actuarial Studies is designed to provide a focus for those students who are interested in pursuing a career in the actuarial sciences. The primary emphasis of the Certificate program is on the mathematical and statistical background that forms the foundation of the work in this area.

The program is most obviously suitable for those students who are majoring in Mathematics or Statistics. It would also be valuable for those who wish eventually to enter the actuarial field, but choose to major in an allied discipline, such as Business or Computer Science. In addition, it allows access to persons in the community who are currently working in this area and wish to develop or upgrade their skills.

Prerequisites:
Before entering the Certificate program, the student must have completed the following courses (or equivalent):

MAC 2311-12	Calculus I-II	
MAC 2313	Multivariable Calculus	
COP 2210	Introduction to Programming	
	or	
CGS 2420	Programming for Engineers	

Recommended Courses:
It is recommended that a student intending to pursue an actuarial career take courses in Technical Writing (ENC 2210), Economics (ECO 3011 Macro-Economics and/or ECO 3021 Micro-Economics) and have exposure to at least two programming languages).

Required Courses:
Upon completion of the following requirements, a student may apply for the Certificate in Actuarial Studies. The Certificate will be awarded at the time of awarding a Bachelor's degree, or upon completion of this work if the student already has a Bachelor's degree.

Statistics requirements: (7)

STA 4321	Mathematical Statistics I	3
STA 4322	Mathematical Statistics II	3
STA 3930	Special Topics-Statistics	1

Mathematics requirements: (7)

MAS 3105	Linear Algebra	3
MAD 3401	Numerical Analysis	3
	or	
MAD 5405	Numerical Methods	
MAT 3930	Special Topics - Mathematics	1

Two options from the following list: (6)

a) STA 4603	Mathematical Techniques of Operations Research	3
	or	
MAP 5236	Operations Research	3
b) STA 4234	Introduction to Regression Analysis	
	or	
STA 5236	Regression Analysis	3
c) One course selected from		
ACG 2021	Accounting for Decisions	3
FIN 3403	Financial Management	3

An overall average of B (3.0 GPA) or better in the 20 semester-hours of coursework listed above, with a grade of C or better in each course. A minimum of 12 of these semester-hours must be earned in courses taken at the University.

African-New World Studies Certificate Program

Carole Boyce Davies, *Director (English)*

Advisory/Coordinating Committee
Jean-Robert Cadely, *(Modern Languages)*
Steve Fjellman, *(Sociology/ Anthropology)*
Chris Gray, *(History)*
Tometro Hopkins, *(English)*
Hyacinth Johnson, *(Dade County Public Schools)*
Rosa Jones *(Vice Provost, Academic Affairs)*
Joyce Shaw Peterson, *(History)*
Jean Rahier, *(Sociology/Anthropology)*
William Reno, *(Political Science)*
Vicki Silvera *(Library)*
Linda Spears Bunton *(Education)*
Linda Strong-Leek, *(English)*
Clarence Taylor, *(History)*
S. Lee Woods, *(Education)*

African Studies Programs respond to canonical deficiencies and student inquiries by developing new theories, discourse, and approaches to academics and the world. Housed within the College of Arts and Sciences, the African-New World Studies Certificate Program provides students with an interdisciplinary approach to the study of the global, economic, cultural, and historical experiences of people of African descent. The Certificate complements students' work in their major fields of study on both the undergraduate and graduate levels while fostering greater understanding of traditionally marginalized topics.

General Requirements (18)
Students complete 18 credit hours of study from disciplines as diverse as geography, international relations, civil engineering, music, and political science, history, literature, and journalism.

Core Courses (6)

PHI 3073	African Philosophy	3
AMH 4570	African-American History	3
AML 2271	African-American Literature	3
ANT 4451	Racial and Cultural Minorities	3
CPO 4034	The Politics of Development and Underdevelopment	3
INR 4024	Ethnicity and Nationality: World Patterns and Problems	3
CPO 3320	African Politics	3
LIN 2612	Black English	3
Certificate Electives		12

Students select four approved electives that the advisor deems appropriate to an African-New World Studies curriculum. These courses may come from the above list of core courses or they may be chosen from among other appropriate courses including those in the sample list below. Students should consult the advisor since new courses are frequently added and special topics courses sometimes concern African-New World Studies topics.

LIN 2612	Black English	3
SYD 4700	Minorities	3
AML 4274	African-American Women Writers	3
AML 4024	Studies in Twentieth Century African-American Literature	3
AML 4014	Studies in Nineteenth Century	3
AML 2272	Major African-American Writers	3
INR 3253	International Relations of Sub-Saharan Africa	
ECS 4433	Economics of the Caribbean	
ANT 4315	Afro-American Anthropology	3

The required courses are designed to provide the foundation of the Program,

offering participants a general understanding of the broad and diverse spectrum of African and diaspora history, politics, and culture.

Course Descriptions

AFA 2000 Introduction to African-New World Studies (3). A core requirement for those considering a certificate or major in African-New World Studies. Key ideas, thinkers, theories, and geographical locations of peoples and culture of the African diaspora.

AFA 4930 African-New World Studies: Theory & Methods Seminar (3). Nature, meaning and intent of intellectual productions in Africa and the diaspora. Examines the works of key thinkers that have made visible some of the submerged or appropriated realities of African peoples.

American Studies Certificate Program

Darden A. Pyron, *Director (History)*

Coordinating Committee
Tucker Arnold, *(English)*
Lynn Berk, *(English)*
Eric Leed, *(History)*
Howard Rock, *(History)*
Donald Watson, *(English)*

The American Studies Certificate Program provides the opportunity for students to examine the nature of American civilization through an interdisciplinary study of American history, literature, culture, and thought. The program provides a grounding in American literature and American history, a sampling of how each discipline approaches the study of American civilization, and an opportunity to follow the approaches of political science, anthropology, philosophy, and religion. Through a seminar in American studies, students will apply the insights of the various disciplines to problems of their own choosing.

The Certificate in American Studies is awarded with a bachelor's degree, or upon completion of Certificate requirements, to a student who already possesses that degree.

General Requirements

A total of seven courses chosen among the prescribed certification courses with a grade of 'C' or higher.

Specific Requirements

AML 2011	Survey of American Literature I	3
AML 2020	Survey of American Literature II	3

Two consecutive semesters chosen from the following:

AMH 3012	American History 1600-1763	
AMH 2010	American History, 1607-1850	3
AMH 2020	American History, 1850 to the Present	3

Two electives chosen from the following:

ANT 3409	Anthropology of Contemporary Society	3
PHH 3700	American Philosophy	3
POT 3204	American Political Thought	3
REL 3100	Religion and Culture	3

An appropriate American Literature course.

. An appropriate American History course.

Asian Studies Certificate Program

Mohiaddin Mesbahi, *Director (International Relations)*

Coordinating Committee
Peter Craumer, *(International Relations)*
Krishnan Dandapani, *(Finance, College of Business)*
Joel Gottlieb, *(Political Science)*
Steve Heine, *(Religious Studies)*
Nathan Katz, *(Religious Studies)*
William Walker III, *(History)*

Students are invited to consider an exciting new opportunity to earn a Certificate in Asian Studies. This certificate program is intended to enhance the student's competitiveness upon graduation and to provide a rich learning experience about a fascinating region of the world.

The Asian Studies Certificate requires at least 18 hours from the coursework listed below. New courses will be added in the future. Courses must be chosen with the approval of the Director.

I. Survey of Asia (9 credits)

Three courses which survey aspects of Asian culture must be chosen with at least one from the Humanities/Fine Arts area and one from the Social Sciences area.

Humanities/Fine Arts

ARH 4552	Art of China and Japan
PHH 3840	Indian Philosophy
PHI 3762	Eastern Philosophy and Religious Thought
REL 3330	Religions of India
REL 4340	Survey of Buddhism
REL 4xxx	Religion and Japanese Culture

Social Sciences

AMH 4544	The United States and the Vietnam War
ANT 4328	Area Studies: Asia or Southeastern Asia and China
CPO 3502	Politics of the Far East
CPO 3541	Politics of China
CPO 3553	Politics of Japan
ECS 3003	Comparative Economic Systems
ECP 3xxx	Economics of Asia
GEA 3554	Geography of Russia and Central Eurasia
GEA 3xxx	Geography of Central Asia and the Caucasus
INR 3232	International Relations of China
INR 3262	International Relations of Russia and the Former USSR
INR 3224	International Relations of East Asia
INR 3xxx	International Relations of Central Asia and the Caucasus
SYD 4610*	Area Studies: Comparative Social Change in Contemporary Asia

II. Professional, Art & Sciences, or Language Courses (6 or more credits)

Two or more courses from the list below:

AMH 4930*	Topics in U.S. History
ASN 4510	Dynamics of Asia
CHI 3130	Chinese I
CHI 3131	Chinese II
CHI 3210	Intermediate Chinese
COM 3xxx	Cultural Communication Patterns of Asia
EDF 3xxx	Education in Japan
EDF 5955	Field Study Abroad: Arts and Education in China
EIN 3xxx	Global Manufacturing and Production
EVR 4xxx	Asian Environmental Issues
HIS 4930*	Special Topics in History
INR 4082	Islam in International Relations
INR 3223	Japan and the United States
INR 4773	Asia and Latin America in World Affairs
INR 4931*	Topics in International Relations
JPN 1120	Japanese I
JPN 1121	Japanese II
JPN 3210	Intermediate Japanese

JPN 3930	Special Topics: Intermediate Japanese Conversation
JPN 3931	Special Topics: Japanese for Business
JPN 3932	Special Topics: Japanese IV
JPN 3xxx	Special Topics: Japanese Grammar and Writing I
PHH 3810	Philosophy of Buddhism
PHP 3840	Chinese and Japanese Philosophy
REL 3313	Sources of Modern Asian Society
REL 4311	Religious Classics of Asia
REL 4312	Jews of Asia
REL 4345	Zen Buddhism
SSE 4xxx	Education in Japan
SYD 3xxx	Comparative Sociology: Japan and the U.S.

*Special Topics and Comparative courses will only be acceptable if the course is directly related or substantially covers Asia or Asian countries or regions. Students should consult with the Director of the Program.

III. Asian Studies Colloquium (3 credits)

All students will take the "capstone" three-credit Asian Studies colloquium, which focuses upon selected themes from multi-disciplinary perspectives. Until this capstone course is in place, please speak with the Director, who will work with students in selecting a substitute course. Students are encouraged to inquire about credit via study abroad programs in Asia.

Students are encouraged to participate in lectures, seminars, and activities of the Asian Studies Program. For more information, contact the Asian Studies Program office in DM 369C, telephone (305) 348-1914, or contact Dr. Mohiaddin Mesbahi, Co-Chair of the Asian Studies program and Director of the Asian Studies Certificate, DM 428, telephone (305) 348-1857.

Brazil Studies Certificate

Theodore R. Young, *Director (Modern Languages)*

Coordinating Committee

Janet M. Chernela, *(Sociology and Anthropology)*
Eduardo Gamarra, *(Political Science)*
John B. Jensen, *(Modern Languages)*
Andrea M. Seidel, *(Theatre and Dance)*
Victor Uribe, *(History)*
Maria Willumsen, *(Economics)*

The Certificate in Brazil Studies is an eighteen credit course of study designed to offer both pre- and post-baccalaureate students as well as degree-seeking students specialization in various disciplines with regard to Brazil. The certificate focuses on Brazil's language and culture, while allowing the student to include such fields as Anthropology, Business, Dance, Environmental Studies, History, International Relations, and Music as related to Brazil. Students may apply toward the certificate up to 5 credits of language instruction from study abroad in Brazil through the FIU/UF summer program in Rio de Janeiro, or from language courses taken at FIU (see advisor). Additionally, up to three credits may be applied for Foreign Study: Advanced Language and Literature (POR 4470).

For all students, the certificate represents a way to gain specialized knowledge of Brazil and Portuguese language. For students pursuing a degree, the certificate should be understood as a complement to the student's major area of study. Non-degree seeking students can use the certificate as a demonstration of their understanding of Brazil through its language, its culture and other areas.

Prescribed Courses and Other Requirements

Courses are to be chosen from the following list in consultation with and approval of the Director. A grade of 'C' or better is required for all courses (C- is not acceptable).

1. All students are required to demonstrate proficiency in the Portuguese language through the Intermediate level. This may be done by completing one of the following sequences:

POR 1130	Portuguese I	5
POR 1131	Portuguese II	5
POR 2200	Intermediate Portuguese	3
	or	
POR 3230	Accelerated Portuguese I	5
POR 3231	Accelerated Portuguese II	5

Students already demonstrating proficiency in Portuguese may be exempt from this requirement.

1. At least 18 semester hours of courses from the following certificate program course listing, or others approved by the certificate program advisor. Students must take courses from at least three fields among core and electives courses (Fields 1-7). Several fields include both Core and Elective courses. Up to five credit hours may be applied from language requirement courses (see above).

Section A: Core Courses

The following core courses fulfill certificate requirements. Students may complete all 18 credits from this list, or they may include a maximum of 6 credits from Elective Course List (Section B). A minimum of seven credits must be taken from this list. A maximum of two tutorial or Independent Study courses may be taken only with professors whose area of research is Brazil, and only with approval from the Director. Additional elective courses may be taken from Elective Course list (Section B).

Field 1: Economics and Finance (additional offerings in Section B)

ECS 3401	The Brazilian Economy	3

Field 2: Environmental Studies and Botany (additional offerings in Section B)

EVR 5066	Ecology of the Amazon	3

Field 3: History

LAH 4600	History of Brazil	3
LAH 5905	Readings in Latin American History: History of Brazil	3

Field 4: Language, Literature and Culture

POR 3400	Advanced Oral Communication	3
POR 3420	Review Grammar/Writing I	3
POR 3421	Review Grammar/Writing II	3
POR 3500	Luso-Brazilian Culture	3
POR 3930	Special Topics in Language/Linguistics	3
POR 4470	Foreign Study: Advanced Language/Literature	1-15
POW 4390	Brazilian Cinema	3
POW 4905	Independent Study	1-3
POW 4930	Special Topics	3
PRT 3401	Literature in Translation	3

Field 5: Sociology and Anthropology

ANT 3780	Anthropology of Brazil	3

Field 6: Political Science, International Relations, and Latin American Studies (additional offerings in Section B)

CPO 4930	Topics in Comparative Politics (Brazil)	3
CPO 5935	Topics in Comparative Politics (Brazil)	3

Field 7: Fine Arts (additional offerings in Section B)

DAA 3343	Cultural Dance Forms (Afro-Brazilian Dance)	3

Section B: Elective Courses
No more than 6 credits may be selected from the following elective courses with Director's approval (contingent upon course content relating to Brazil). These courses should be understood as a partial list; students should consult with the Director of the certificate program about current course offerings.

Field 1: Economics and Finance (additional offerings in Section A)

ECO 4701	World Economy	3
ECO 4906	Undergraduate Tutorial	1-3
ECO 5906	Advanced Individual Studies	1-3
ECS 3402	Political Economy of South America	3
ECS 4403	Latin American Economics	3
FIN 4604	International Finance	3
MAN 4660	Business in Latin America	3

Field 2: Environmental Studies and Botany (additional offerings in Section A)

BOT 3663	Tropical Botany	3
BOT 3723C	Taxonomy of Tropical Plants	4
BOT 5606	Ethnobotany	3
EVR 5067	Tropical Forest Conservation and Utilization	3

Field 6: Political Science, International Relations, and Latin American Studies (additional offerings in Section A)

CPO 3055	Authoritarian Politics	3
CPO 3304	Politics of Latin America	3
CPO 4303	Politics of South America	3
INR 3243	International Relations of Latin America	3
INR 4244	Latin American World Politics	3
LAS 3	Americas	3

Field 7: Fine Arts (additional offerings in Section A)

DAN 3910	Latin American and Caribbean Dance and Cultures	3
MUH 3541	Music of Latin America	3

The Certificate in Brazil Studies requires study in three different general fields from a list of seven possible areas. These fields represent courses in Portuguese, Economics, Finance, Management, Environmental Studies, Botany, History, Sociology and Anthropology, Political Science, International Relations, Latin American Studies, and Music. All courses acceptable towards the certificate deal with some aspect of Brazil, and the combination of courses allows for the student to gain broad-based, multidisciplinary expertise within a specialization on Brazil.

For more information contact: Dr. Theodore R. Young, Certificate Advisor, Department of Modern Languages, DM 494. Telephone: (305) 348-1959; fax: (305) 348-1085; e-mail: youngtr@fiu.edu

Comparative Immunology Certificate Program

Charles H. Bigger, *Director (Biological Sciences)*
Coordinating Committee
Victor Apanius, *(Biological Sciences)*
Sylvia Smith, *(Medical Laboratory Sciences)*

This academic certificate provides students with in-depth training in the interdisciplinary research field of Comparative Immunology. In general, Comparative Immunology is the study of the immune responses and defenses of animals other than humans. Research areas include studies in domesticated animal health, the use of animal models for human biomedical research, and the hunt for natural products of biomedical interest. Additionally, in recent years, there has been an increasing interest and concern raised about wild life (terrestrial and aquatic) health and diseases. This field also includes the integration of immunology, endocrinology, and neuroscience.

Prerequisite Courses

BSC 1010	General Biology I	3
BSC 1010L	General Biology Lab I	1
BSC 1011	General Biology II	3
BSC 1011L	General Biology Lab II	1
CHM 1045	General Chemistry I	3
CHM 1045lL	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General chemistry II Lab	1

Total credits required: 20 semester hours

Required Courses

PCB 4233	Immunology	3
PCB 4233L	Immunology Lab	1
PCB 5238	Marine Comparative Immunology Workshop	1
PCB 6235	Comparative Immunology	3
MLS 5515	Advanced Diagnostic Immunology	3

Choice of one: 3 credits required

PCB 6237	Immunogenetics
PCB 5754	Comparative Pathology
MLS 6180	Immunopathology
MLS 5xxx	Seminar Topics in Comparative Imunology

(students enroll for three semesters)

Three credits in a Comparative Immunology Lab in one of the following courses:

MLS 4905/6905	Independent Study
MLS 4910/6910	Directed Independent Research
BSC 4914/6916	Student Research Laboratory

Consumer Affairs Certificate Program

Advisory Committee
Yao Apasu *(Marketing and Business Environment)*
Scott L. Fraser *(Psychology)*
Shearon Lowery *(Sociology/ Anthropology)*
Samuel Shapiro *(Statistics)*

The Certificate Program in Consumer Affairs provides a sound educational base for those dealing with consumer satisfaction and customer service issues.

The Certificate Program is intended to provide business, government, education, industry, and labor with a resource for selecting and training personnel in customer service and customer satisfaction.

For more information on the program, please contact the Director in DM 252 348-3466. Required Courses.

The Certificate will be awarded upon satisfactory completion of six courses from among those listed below. Students are admitted to the program provided proper application has been made to the Director.

Group I: (Choose three courses)

COA 2410	Consumer Decisions	3
ECO 3021	Economics and Society -Micro	3
EVR 3011	Environmental Resources and Pollution	3
MAR 4503	Consumer Behavior	3
SOP 4645	Consumer Psychology	3
SYP 4421	Man, Society, and Technology	3

Group II: (Choose three courses)

COA 4460	Consumer and Technology	3
COA 5450	Consumer Legislation	3
EVR 3010	Energy Flow in Natural and Man-made Systems	3
FOS 3004	Food and the Consumer	3
MAN 3503	Managerial Decision Making	3
MAN 4151	Behavioral Science	

	in Management	3
SOP 4649	Experimental Consumer Psychology	2
SOP 4649L	Experimental Consumer Psychology Lab	3
SYP 4321	Mass Culture	3

Note: Students may substitute an independent research project working with any professor provided the professor approves the request and final approval is obtained in writing from the Program Director.

Environmental Studies Certificate Program

John Parker, *Director (Environmental Studies)*

Coordinating Committee

Mahadev Bhat, *(Environmental Studies/Economics)*

Kevin Hill, *(Political Science)*

Jim Huchingson, *(Religious Studies)*

Suzanne Koptur, *(Biology)*

Rod Neumann, *(International Relations)*

William Vickers, *(Sociology/Anthropology)*

The Certificate Program in Environmental Studies is designed to provide students in various majors with the unique perspective of interdisciplinary ecological education to both enrich and expand the breadth of their primary training. The Certificate seeks to provide participants with an analytic basis for understanding the milieu of local and global environmental problems and processes.

The program requires no prerequisite and is complementary to majors in all disciplines and schools at the University. This certificate is appropriate also for persons who already have a degree but would like to increase their knowledge of contemporary environmental issues.

The curriculum for the Environmental Studies Certificate consists of six courses (18-20 credits) as follows:

EVR 3011/L	Environmental Pollution and Lab	4
EVR 3013/L	Ecology of South Florida and Lab	4

Students with science backgrounds should take instead two environmental science courses from the following:

EVR 4026	Biotic Resources	3
EVR 4211	Water Resources	3
EVR 4231	Air Resources	3
EVR 4312	Energy Resources	3

Two additional courses from the following:

ANT 3403	Cultural Ecology
GEO 3421	Cultural Geography
ECP 3302	Environmental Economics
EVR 4415	Population and Environment Issues
EVR 4352	U.S. Environmental Policy
INR 4350	International Environmental Policy
PUP 3206	International Law and the Environment
PUP 4203	Environmental Politics
REL 3492	Nature and Human Values

Two additional Environmental Electives from the following:

AMH 4930	Environmental History
ANT 3403	Cultural Ecology
ANT 4552	Primate Behavior and Ecology
BOT 3014	Plant Life Histories
BOT 3153L	Local Flora Lab
BSC 5825	Wildlife Biology
ECP 3302	Introduction to Environmental Economics
ECP 4314	Land and Resource Economics
ENY 4060	Advanced Entomology & Lab
EVR 3010	Energy Flows in Natural and Man-Made Systems
EVR 3013	Ecology of South Florida & Lab
EVR 4415	Population and Environment Issues
EVR 4026	Biotic Resources
EVR 4211	Water Resources
EVR 4231	Air Resources
EVR 4312	Energy Resources
EVR 4321	Sustainable Resource Development
EVR 4323	Restoration Ecology
EVR 4352	U.S. Environmental Policy
EVR 4401	Conservation Biology
EVR 4862	U.S. Energy Policy
EVR 4905	Independent Study
EVR 5061	South Florida Ecology
EVR 5065	Rainforest Ecology
EVR 5353	International Energy Policy
EVR 5410	Human Population & Earth's Ecosystem
EVR 5907	Research and Independent Study
EVR 5935	Special Topics
EVR 5936	Topics in Environmental Studies
GEO 3510	Earth Resources
GEO 3421	Cultural Geography
GLY 3030	Environmental Geology & Lab
INR 3043	Population and Society
INR 4054	World Resources, World Order
INR 4350	International Environmental Politics
LIT 4930	Literature and the Environment
MCB 4603	Microbial Ecology
PCB 3043	Ecology & Lab
PUP 3206	International Law and the Environment
PUP 4203	Environmental Politics
REL 3492	Nature and Human Values
SOP 4712	Environmental Psychology
SYP 4421	Man, Society and Technology
URP 4149	Planning and Human Ecology
ZOO 3892C	Biology of Captive Wildlife
ZOO 4423C	Herpetology
Total Credit Hours:		18-20

Ethnic Studies Certificate Program

John F. Stack, Jr., *Director (Political Science)*

Coordinating Committee

Ralph S. Clem, *(International Relations)*

Anthony P. Maingot, *(Sociology/Anthropology)*

Mark D. Szuchman, *(History)*

The College of Arts and Sciences offers the student a program in ethnic studies, in recognition of the place ethnic studies enjoys in the social sciences and humanities, and the importance of ethnic studies in today's world. The Program seeks to establish a proper balance between its academic goals and objectives and the on-going concerns of the University's local and international constituencies. The Program contains four specialized areas: Black Studies, Jewish Studies, Cuban Studies, and Comparative Studies.

The Certificate in Ethnic Studies is awarded with a bachelor's degree or upon completion of Certificate requirements, to a student who already possesses that degree. The Certificate will specify the area of concentration chosen by the student.

A student may acquire the Certificate in Ethnic Studies by fulfilling the following requirements:

General Requirements: A minimum of six courses with a grade 'C' or higher.

Courses in both the 'Core' and 'Specialized' areas (indicated below)

must be taken from at least two different departments.

A maximum of one course in a relevant language will be accepted.

A maximum of two courses of independent study will be accepted.

The Program Director must approve the student's overall plan and all special topics courses must be approved by Certificate advisors in each area.

The Program is especially eager to encourage programs of study abroad and field work in general. Credit for such programs will be awarded on an individual basis after evaluation by the Director and the Coordinating Committee, but in no case will it consist of more than three courses towards the Certificate.

Specific Requirements

A core of a minimum of two to three courses in a theoretical and conceptual nature in the area of ethnic studies

A minimum of three to four specialized courses in one of the four distinct areas: Black Studies, Jewish Studies, Cuban Studies, Comparative Studies.

Core Courses

SYD 4700 or ANT 4451: Minorities; POS 4314: Ethnic Politics; INR 4084: Ethnicity in World Politics; INR 4024: Ethnicity and Nationality; ECP 3144: Economics of Race and Sex Discrimination; SOP 4444: Attitudes and Ethnicity.

Specialized Courses

(*Note*: This is not an exhaustive list; students should consult with the Director of the program on current offerings.)

Specialized Courses in Cuban Studies

ECS 4430	The Economic Development of Cuba	3
FOW 4390	Genre Studies *(with reference to Cuban Literature)*	3
INR 3246	International Relations of the Caribbean	3
SYD 4630	Latin American and Caribbean Social Structures	3
SYA 4124	Social Theory and Third World Innovations	3

Specialized Courses in Black Studies

AML 5305	Major American Literary Figures	3
ANT 4315	Afro-American Anthropology	3
ANT 4352	African Peoples Culture	3
LIT 4188	Regional Literature in English	3
LIT 4930	Special Topics	3
MUH 2116	Evolution of Jazz	3

Specialized Courses in Jewish Studies

GEA 3630	Population and Geography of the Middle East	3
INR 3274	International Relations of the Middle East	3

European Studies Certificate

Elisabeth Prugl, *Director, (International Relations)*
Coordinating Committee
Pascale Becel, *Modern Languages*
Nina Caputo, *History*
Emily Copeland, *International Relations*
Marion Demos, *Humanities*
Hugh Elton, *History*
Maria A. Gomez, *Modern Languages*
Christine Gudorf, *Religious Studies*
Alan Gummerson, *Economics*
Constantine Hadjilambrinos, *Environmental Studies*
Mitchell Hart, *History*
Alan Kahan, *History*
George Kovacs, *Philosophy*
Asher Milbauer, *English*
Nicol Rae, *Political Science*
Meri-Jane Rochelson, *English*
Mary Volcansek, *Political Science*

The aim of the European Studies Certificate is to enable students to obtain an interdisciplinary concentration in various aspects of Europe. It is designed to enhance a student's understanding of European politics, society, and culture, drawing on a broad range of courses in the arts and sciences and thereby to complement the student's major course of study. The certificate is also available to non-degree seeking students. Students interested in the program should contact the Director.

Certificate Requirements:

The program requires 15 credit hours (5 courses), distributed as follows:

Introductory requirement (3 credits from among the following);

CPO 3103	Politics of Western Europe	
CPO 4461	Politics of Eastern Europe	
INR 3214	International Relations of Europe	

Language requirement (3 credits)

One course in a European language at the intermediate level or above (2000 or higher)

Breadth requirement (6 credits)

Two courses, at least one of which must be from outside the social sciences, from an approved list published in each term schedule and available from the Certificate Director. These will include courses from the Departments of Economics, English, Environmental Studies, History, Humanities, International Relations, Modern Languages, Philosophy, Political Science, Religion, and Visual Arts.

Exit requirement (3 credits)

Interdisciplinary colloquium to be taken during the student's senior year, that will focues on a broad European topic. In it, each student will be expected to complete a major research project.

Forensic Science Certificate Program

Kenneth G. Furton, *Director (Chemistry/IFRI)*
Coordinating Committee
Martin L. Tracey, Jr.,*(Biological Sciences)*
Janet A. Lineback, *(Medical Laboratory Sciences)*
W. Clinton Terry, *(Criminal Justice)*

The Certificate in Forensic Science is designed to provide a focus for those students who are interested in pursuing a career in the forensic sciences. The program is suitable for students majoring in biology, chemistry, criminal justice, medical laboratory sciences, or an allied discipline who wish to enter the field of forensic science. The program also allows access to persons in the community who are currently working in this area to develop or upgrade their skills.

The field of forensic science is very interdisciplinary, requiring good basic training in the physical and natural sciences, as well as an understanding of the criminal justice system. Upon completion of the following courses, a student may apply for a certificate in Forensic Science. The certificate will be awarded at the time of awarding the Bachelor's degree, or upon completion of this work if the student already has a Bachelor's degree. The program consists of 16-18 semester credit hours of required coursework as follows:

Required Courses: (12)

CCJ 3020	Overview of Criminal Justice (or cognate)	3
MLS 4440	Forensic Serology	3
CHS 4591	Forensic Science Internship	3

CHS 4503	Forensic Science	3
	or	
CHS 5531	Forensic Analysis	3

Specialized Courses: (4-6) in one of the following specializations

Biology (4)

PCB 4524	Molecular Biology	3
PCB 4524L	Molecular Biology Lab	1

Chemistry (5)

CHM 4130	Modern Analytical Chemistry	3
CHM 4130L	Modern Analytical Chemistry Lab	2

Criminal Justice (6)

CCJ 3101	Law Enforcement Systems	3
CCJ 3271	Criminal Procedure	3

Medical Laboratory Science (4)

MLS 3605	Clinical Instrumentation	3
MLS 3605L	Clinical Instrumentation Lab 1	

Elective Courses

Additional recommended courses chosen in consultation with your departmental advisor.

BCH 3033	General Biochemistry	4
BOT 1010	Introductory Botany	3
CHM 4305	Biological Chemistry	3
CHS 4505L	Forensic Science Lab	1
GLY 3030	Environmental Geology	3
SOP 4842	Legal Psychology	3
STA 3111	Statistics I	4

Gerontological Studies Certificate Program

Joan Erber, *Director (Psychology)*
Coordinating Committee
Myra Crabtree, *(Education)*
Leon A. Cuervo, *(Biological Sciences)*
Katharine Curry, *(Dietetics and Nutrition)*
Rosebud Foster, *(Health Services Administration)*
Shearon A. Lowery, *(Sociology and Anthropology)*
Thomas Skalko, *(Education)*

The Certificate Program in Gerontological Studies is an undergraduate, academic certificate program designed to complement the student's major area of study.

The goals of the program are: (1) to stimulate interest in the study of aging; (2) to provide an introduction to the field of gerontology from a multidisciplinary perspective; (3) to provide foundation courses for advanced study in gerontology; and (4) to provide students seeking employment upon graduation with a sound background which will make them attractive to employers.

The State of Florida has the largest percentage of persons over 65. Demographic projections indicate that not only will Florida continue to increase its percentage of older persons, but so will the nation as a whole. Thus, it has become imperative that gerontological knowledge be increased and shared. This is critical, both for individuals to function as informed citizens and for enhanced gerontological teaching, research, and service.

The present certificate program seeks to meet these needs by providing a multidisciplinary approach to the study of aging. The Certificate in Gerontological Studies is awarded with a bachelor's degree, or on completion of Certificate requirements to a student who already possesses that degree. Interested students should meet with the director early to plan an individualized program to meet the student's educational or occupational goals.

Certificate Requirements: (17-18)

1. A minimum of six courses must be completed with a grade of 'C' or higher in each course.

2. Courses must be taken from at least three different disciplines.

3. Electives must be taken from two different categories listed below.

4. Up to two gerontologically relevant courses taken elsewhere may be accepted by the director.

5. Students should contact the director during registration for a list of certificate courses offered each semester.

Required Courses: (9)

DEP 4464	Psychology of Aging	3
SYP 4730	Sociology of Aging	3
PCB 3241	Physiology of Aging	3

Elective Courses (8-9)

Aging in the Context of the Life-Span

DEP 2000	Human Growth and Development	3
DEP 4407	Current Issues in Aging	3
FAD 2230	Family Life Cycle	3
FAD 5450	Human Sexuality	3

Death and Dying

SYP 4740	Sociology of Death	3
PHM 4050	Philosophy of Death	3

Health and Rehabilitation

OTH 3160	Adaptive Living Skills	2
OTH 3160L	Adaptive Living Skills Lab	1
PHT 3400	Emotional Aspects of Physical Disability	2
SOP 4834	Psychology of Health and Illness	3
HME 5255	Independent Living for the Handicapped	3

Nutrition

HUN 2201	Principles of Nutrition	3
HUN 4403	Life Cycle Nutrition	3

Public Affairs and Services

HSA 4113	Issues and Trends in Health Care Delivery	3
HSA 3103	Health & Social Service Delivery Systems	3

Supervised Research/ Practicum/ Special Topics: (3)

Students wishing to take an independent research project or an independent practicum in gerontology should: First obtain the collaboration of a faculty sponsor; and second, obtain the approval of the Certificate Director prior to beginning the project by submitting a one-page proposal. Credit will be obtained under the appropriate independent studies course in the faculty advisor's department. Also, special topics and other courses that have gerontological relevance may be acceptable for credit with permission of the Director.

International Studies Certificate Program

Damian Fernandez, *Director (International Relations)*
Advisory Council
Robert Farrell, *(Education)*
Laurence Miller, *(Library)*
Luis Salas, *(Criminal Justice)*
Mark Rosenberg, *(Political Science)*
Wunnava Subbarao, *(Electrical Engineering)*

International Studies constitutes an important focus for the University. The International Studies Program promotes an interdisciplinary approach to the study of transnational phenomena and awards a Certificate to degree and non-degree students who complete successfully its requirements (stated below). Students pursuing a bachelor's degree may take the Certificate Program to complement their major disciplinary area of study. Those not seeking a degree may take the Certificate Program to obtain a broad and systematic introduction to International Studies. Students interested in this Program should consult with the Director of International Studies.

Program: (Minimum of 18 credits)

At least one of the following courses in International Politics/Relations:

INR 2001	Introduction to International Relations
INR 2002	Dynamics of World Politics
INR 3003	Foundations of International Relations

At least one of the following courses in International Economics/ Business:

MAN 3602	International Business
ECO 4701	World Economy
ECO 4703	International Economics

Three semester hours of independent study under faculty supervision during which a research paper will be written. The independent study and the resulting paper must be approved by the program Director. This paper will be discussed in a joint faculty-student seminar.

A minimum of nine semester hours of coursework from courses identified by the program. A list of such courses will be circulated to all students in the program at the start of each semester.

Basic competency (two-semester college level) in a language other than English. Language courses where necessary, will not be included as courses within the 18-semester hour coursework requirement.

A minimum grade of 'C' in each course taken in the program. Courses must be taken in at least three different departments.

Prerequisites that may be required for courses in the program will not be included as courses within the 12-semester hour coursework requirement.

Judaic Studies Certificate Program

Stephen M. Fain, *(Educational Leadership), Director, Institute of Judaic Studies*
Mitchell Hart, *(History), Director, Program in Jewish Studies*
Nina Caputo, *(History)*
Oren Stier, *(Religious Studies)*
Nathan Katz, *(Religious Studies)*
Florence Kaufman, *(English)*
Erik Larson, *(Religious Studies)*
Abe Lavender, *(Sociology)*
Asher Milbauer, *(English)*
Meri-Jane Rochelson, *(English)*
Howard Rock, *(History)*
Mark Szuchman, *(History)*

The Certificate in Judaic Studies will require 18 hours of coursework. Candidates for the Certificate in Judaic Studies will select an advisor from among the Coordinating Committee members, who will approve or disapprove specific courses to meet the following requirements:

Students must demonstrate mastery of the Hebrew language at least at the HBR 2200 level. Up to five credit hours of Hebrew language courses may be credited toward the Certificate.

The Certificate requires students to take Judaism (REL 3600) for three credits, plus approved courses with distribution requirements as follows:

Literature, and the Arts
A minimum of three credits will be selected from such courses as: The Jewish Cinema, Jewish-American Women Writers, and Holocaust Literature.

Religious Studies
At least three credits will be selected from such courses as: Hebrew Scriptures, The Ethics of Judaism, The Modernization of Judaism, and The Holocaust.

Social-Scientific Approaches
At least three credits will be selected from such courses as: Population and Geography of the Middle East, International Relations of the Middle East, History of the Holocaust, Jewish History to 1750, Modern Jewish History, and Black-Jewish Relations.

Labor Studies Certificate Program

The Certificate in Labor Studies is an 18 credit course of study designed to offer degree-seeking students from a wide range of backgrounds an understanding of the major issues in the field. Courses must be taken from at least two disciplines other than Labor Studies. The Certificate is also appropriate for students who already have a degree and would like to acquire additional knowledge about various facets of the field of Labor Studies. Labor Studies as a discipline acknowledges insights which have emerged from decades of university-union cooperation in labor education and fulfills an academic need to study labor affairs apart from the traditional framework of industrial relations. According to this concept, Labor Studies is the academic examination of issues which confront people in the pursuit of their need for rewarding employment. The focus of inquiry is on workers as individuals, as members and/or leaders in their unions or associations, and as citizens of their communities.

Courses must be taken from at least two disciplines in addition to Labor Studies. Minimum of 18 credit hours for certificate. Courses are to be selected in consultation with advisor. A grade of 'C' or better is required for all courses. (C- is not acceptable).

Required Courses: (12)

LBS 3001	Introduction to Labor Studies

Minimum of three courses (9 hours) to be chosen from the following: (additional courses from this list may be used to fulfill electives)

LBS 4101	Theories of the Labor Movement
LBS 4210	Women and the Labor Movement
LBS 4501	Labor and Industrial Relations Law
LBS 4900	Directed Study in Labor Studies
SYO 4360	Industrial Sociology

Electives (6 hours)

AMH 3270	Contemporary U.S. History
AMH 4500	United States Labor History
ECO 3011	Economics, Man & Society, Macro
ECO 3021	Economics, Man & Society, Micro
ECO 3101	Intermediate Microeconomics
ECO 4622	Economic Development of U.S.
ECO 4701	World Economy
ECP 3123	Economics of Poverty
ECP 4203	Introduction to Labor Economics
ECP 4204	Theory of Labor Economics
INP 2002	Introductory Industrial/ Organizational Psychology
INR 3004	Patterns of International Relations
LBS 4401	Collective Bargaining in Industrial Systems
LBS 4150	Contemporary Labor Issues
LBS 4260	Administration of Labor Organizations
LBS 4461	Labor Dispute Resolution
LBS 4654	Comparative and International Labor Studies
LBS 4905	Topics in Labor Studies
LBS 4930	Topics in Labor Studies
POS 3044	Government and Politics of the U.S.
POT 3204	American Political Thought
PUP 4004	Public Policy: U.S.

Labor Studies and Labor Relations Professional Certificate Program

The Professional Certificate in Labor Studies and Labor Relations is an eighteen credit course of study designed to offer both pre and post-baccalaureate as well as degree-seeking students the opportunity to

obtain specialized knowledge in the areas of labor studies, collective bargaining and labor-management relations. This certificate is designed to provide students with broad-based knowledge about the field of labor studies with its focus upon the examination of the issues which confront people in the pursuit of their need for rewarding employment as well as insights from the field of labor relations with its emphasis upon the formal interactions between labor and management. Students who are interested in the practical as well as the more theoretical issues of labor studies and labor relations will be especially interested in this certificate.

Courses should be taken from at least one discipline in addition to Labor Studies. Minimum of eighteen credit hours for certificate. Courses are to be selected in consultation with and agreement of advisor. A grade of 'C' or better is required for all courses. (C- is not acceptable).

Required Courses : (9)

All students are required to take LBS 3001, Introduction to Labor Studies, and a minimum of two courses to be selected from among the following: (additional courses may be used to fulfill electives).

LBS 4401	Collective Bargaining in Industrial Systems
	or
MAN 4401	Collective Bargaining
LBS 4461	Labor Dispute Resolution
	or
MAN 4410	Union-Management Relations
LBS 4150	Contemporary Labor Issues
LBS 4260	Administration of Labor Organizations
LBS 4654	Comparative and International Labor Studies
PAD 5427	Collective Bargaining in the Public Sector

Electives (9):

To be chosen from the following in consultation with and approval of advisor. (Some courses may require prerequisites).

AMH 3270	Contemporary U.S. History
ECO 3011	Economics, Man & Society, Macro
ECO 3021	Economics, Man & Society, Micro
ECP 4203	Introduction to Labor Economics
EIN 4214	Safety in Engineering
EIN 4261	Industrial Hygiene
INP 2002	Introductory Industrial/ Organizational Psychology
LBS 4101	Theories of the Labor Movement
LBS 4210	Women and the Labor Movement
LBS 4501	Labor and Industrial Relations Law
LBS 4900	Directed Study in Labor Studies
LBS 4905	Topics in Labor Studies
LBS 4930	Topics in Labor Studies
LBS 5464	Fact Finding and Arbitration
MAN 4610	International and Comparative Industrial Relations
PAD 3034	Public Policy and Its Administration
PAD 4024	Concepts and Issues in Public Administration
PAD 4223	Public Sector Bargaining
POS 2042	Government and Politics of the U.S.
POS 3424	Legislative Process
POS 4122	State Government and Politics
PUP 4004	Public Policy (U.S.)
STA 1013	Statistics for Social Services
SPC 2600	Public Speaking
SYA 3300	Research Methods
SYO 4360	Industrial Sociology

Latin American and Caribbean Studies Certificate Program

Eduardo A. Gamarra, *(Director and Professor, Political Science)*

The program in Latin American and Caribbean studies at Florida International University represents a significant way in which the University fulfills its commitment to advancing international understanding. The program, offered through the Latin American and Caribbean Center (LACC), encourages students to take an interdisciplinary approach to this important area by awarding a certificate to both degree and non-degree seeking students who successfully complete the requirements. For students pursuing a degree, the certificate program should be understood as a complement to the student's major area or discipline of study. For non-degree seeking students, the certificate represents a means of gaining a fuller, more complete understanding of Latin America and the Caribbean without pursuing a lengthy course of study at the University.

Students registered in the certificate program receive regular mailings announcing course offerings, seminars, foreign study opportunities, and other special events. They also receive *LACC News,* a newsletter reporting on people and activities concerning Latin American and Caribbean affairs at the university.

LACC has sponsored summer study abroad opportunities since 1981 in Mexico, Costa Rica, Puerto Rico, Barbados, Brazil, Haiti, Belize, and the Dominican Republic. In addition, LACC has placed certificate students in summer programs sponsored by the Organization of American States in Argentina and Costa Rica.

An important component of the certificate program is the library's Latin American and Caribbean holdings, which now exceed 35,000 volumes. Regionally, the collection is strongest in works on Cuba and Central America, with substantial strength in Caribbean countries as well. The library's Latin American and Caribbean Collection receives about 45 periodicals and eight daily or weekly newspapers (this is in addition to 120 Latin American and Caribbean-related publications that can be found in the library's general periodical section). LACC also has its own collection of approximately 150 publications, primarily newsletters and research report series. Moreover, the audio-visual section of the library contains films and video recordings on Latin America and the Caribbean and an extensive slide collection of Latin American art works.

Certificate Requirements:

1. At least 15 credit hours of courses with a grade of 'C' or better from the certificate program course listing, or approved by the certificate program faculty advisor. Courses must be taken in at least three different disciplines and from at least two disciplines outside of the student's departmental major.
2. A two-course, introductory language sequence at FIU in Spanish, Portuguese, or French. Exemption from this requirement may be obtained through a proficiency examination administered by the FIU Department of Modern Languages. Language courses may not be counted toward the fulfillment of requirement (1) above.
3. A minimum of three semester hours of independent study under the supervision of a certificate program faculty member or other instructor

approved by the certificate program faculty advisor. As part of this requirement, the student will prepare a research paper on a theme directly concerned with some aspect of Latin American and Caribbean affairs.

Students interested in the certificate program should consult LACC's student advisor. Call (305) 348-2894 for an appointment.

The following courses fulfill certificate requirements. These courses represent a partial list; students should consult with certificate program advisors about current course offerings.

Anthropology

ANT 3144	Prehistory of the Americas	3
ANT 3251	Peasant Society	3
ANT 3403	Cultural Ecology	3
ANT 4211	Afro-Cuban Religion	3
ANT 4224	Tribal Art	3
ANT 4306	The Third World	3
ANT 4324	Mexico	3
ANT 4328	Maya Civilization	3
ANT 4330	Contemporary Maya Cultures	3
ANT 4332	Latin America	3
ANT 4334	Latin American Women	3
ANT 4340	Cultures of the Caribbean	3
ANT 4343	Cuban Culture and Society	3

Economics

ECO 4701	The World Economy	3
ECO 4703	International Economics	3
ECO 4733	Multinational Corporations	3
ECO 5709	The World Economy	3
ECS 3402	The Political Economy of South America	3
ECS 4013	Economic Development	3
ECS 4403	Economics of Latin America	3
ECS 4404	Economic Integration: Latin America	3
ECS 4430	The Economic Development of Cuba: Past and Present	3
ECS 4432	Economic Integration: Caribbean	3

Education

SSE 4380	Developing a Global Perspective	3

Geology

GLY 3157	Elements of Caribbean Geology	3
GLY 5621	Caribbean Stratigraphic Micropaleontology	3
GLY 5785	Caribbean Shallow-Marine Environments	3

History

LAH 2020	Latin American Civilization	3
LAH 2092	The Latin Americans	3
LAH 3132	The Formation of Latin America	3
LAH 3200	Latin America: The National Period	3
LAH 3450	Central America	3
LAH 4433	Modern Mexico	3
LAH 4482	Cuba: 18th-20th Centuries	3
LAH 4511	Argentina: 1776- Present	3
LAH 4600	History of Brazil	3
LAH 4720	Family/Land in Latin American History	3
LAH 4750	Law/Society in Latin American History	3
LAH 4932	Topics in Latin American History	3

International Business

ACG 4251	International Accounting	3
MAN 3602	International Business	3
MAN 4600	International Management	3
MAN 4610	International and Comparative Industrial Relations	3
MAN 6601	International Management	3
MAN 6608	International Business	3
MAN 6635	International Business Policy	3

International Relations

GEA 3320	Population and Geography of the Caribbean	3
GEA 3400	Population and Geography of Latin America	3
INR 3243	International Relations of Latin America	3
INR 3246	International Relations of the Caribbean	3
INR 4247	Caribbean Regional Relations	3
INR 4283	International Relations, Development, and the Third World	3

Marketing

MAR 4156	International Marketing	3
MAR 4803	Cases in Marketing Management	3
MAR 4144	Export Marketing	3

Modern Languages

FOL 3930	Haitian Creole	3
FRE 3500	History of French Civilization (Latin American course)	3
FRE 4501	Contemporary French Society (Latin American course)	3
POR 3500	Luso-Brazilian Culture	3
POW 4930	The Literature of Brazil	3
SPN 3520	Spanish American Culture	3
SPN 4500	Spanish Culture	3
SPW 3371	The Latin American Short Story	3
SPW 3520	Prose and Society (Latin American course)	3
SPW 4304	Latin American Theatre	3
SPW 4351	Spanish American Poetry I	3
SPW 4352	Spanish American Poetry II	3
SPW 4364	The Spanish American Essay	3
SPW 5237	The Traditional Spanish American Novel	3
SPW 5286	Contemporary Spanish American Novel	3
SPW 5358	Prose and Poetry of Jorge Luis Borges	3
SPW 5359	Poetry of Pablo Neruda	3
SPW 5575	Spanish American Modernism	3

Philosophy and Religion

PHH 3042	Latin American Philosophies	3
REL 4481	Contemporary Latin American Religious Thought	3

Political Science

CPO 3055	Authoritarian Politics	3
CPO 3304	Politics of Latin America	3
CPO 4034	Politics of Development and Underdevelopment	3
CPO 4053	Political Repression and Human Rights	3
CPO 4303	Politics of South America	3
CPO 4323	Politics of the Caribbean	3
CPO 4333	Politics of Central America	3
CPO 4340	Politics of Mexico	3
CPO 4360	Cuban Politics	3
CPO 5036	Politics of Development	3
INR 4244	Latin America in International Politics	3

Psychology

SOP 4050	Social Psychology in Latin America	3

Sociology

SYA 4124	Social Theory and Third World Innovations	3
SYD 4630	Latin American and Caribbean Social Structures	3
SYD 4610	Area Studies (Latin American and/or Caribbean)	3
SYD 4700	Minorities	3
SYP 4600	Art and Literature of the Caribbean	3

Theatre and Dance

DAN 4932	Dance Ethnology Visual Arts	3
ARH 4650	Pre-Columbian Art	3
ARH 4652	Andean Pre-Columbian Art	3
ARH 4670	20th Century Latin American Art	3

Law, Ethics and Society Certificate Program

Kenneth Rogerson, *Director*
Coordinating Committee
William Reno, *(Political Science)*
Kenneth Henley, *(Philosophy and Religion)*
Stephen Fjellman, *(Sociology/ Anthropology)*

This program offers a course of studies in the broad field of normative or value issues. The program seeks to develop a curriculum which will study these issues from a variety of perspectives. From philosophy we offer courses in ethical theory, social and political theory and various applied ethical courses-courses in medical ethics, business ethics, environmental ethics and so on. From political science the student sees how normative issues are considered in law and politics. In this context it is appropriate to have courses dealing with constitutional interpretation of rulings like affirmative action, environmental regulation and the like. From sociology and anthropology the student takes courses dealing with how values are incorporated in our society and how such values compare to other societies around the world.

Required Courses:

1. The certificate requires six (3 credit) courses from the following lists.
2. Two core (starred) courses are required.
3. Of the six courses,including core courses, at least one course must be taken from each of the following categories—Ethics, Law, and Society

Law

PHM 3400	Philosophy of Law*
POS 3604	Constitutional Law: Limit*
POS 3603	Constitutional Law: Powers*
POS 3283	The Judicial Process
POS 4944	Judicial Internship
SOP 4842	Legal Psychology
PSY 4930	Women, Law and Social Psychology
INR 3403	International Law
CCJ 4252	Criminal Justice and the Constitution
CCJ 4280	Law and Criminal Justice
POT 3054	Modern Political Theory
PHM 4430	Topics in Philosophy of Law

Ethics

PHI 3651	Ethics*
PHI 3638	Contemporary Ethical Issues*
POT 3621	Theories of Justice
PHM 3200	Social and Political Philosophy
PHI 4633	Biomedical Ethics
PHM 4050	Philosophy of Death
HSA 5455	Ethical Decisions in Health Services Administration
INR 4090	Ethical Problems in International Relations
PHM 4360	Topics in Political Philosophy

Society

ISS 3330	Ethical Issues in Social Science Research*
POT 3302	Political Ideologies
SYG 3320	Social Deviancy
SYG 2010	Social Problems
ANT 3302	Male and Female: Sex Roles and Sexuality
CPO 4057	Political Violence and Revolution
PAD 4040	Public Values, Ethics and Morality in a Changing Environment
PAD 5041	Values and Technology in Modern Society
POT 3054	Modern Political Theory

Legal Translation and Court Interpreting Certificate Program

This professional certificate program provides a theoretical basis and practical experience to prepare the student for employment at entry level in the legal translation and interpretation fields (E-S and S-E). This curriculum does not train specifically for work as conference interpreter, but provides a good background and the experience needed for further study in both legal translation and court interpreting. Through its academic track, it offers complementary studies for the practitioner who wants to strengthen his or her competence in the field. The program consists of 30 semester credit hours.

Prerequisites

ENC 1200	Business Letters and Reports	3

No credits allowed. These prerequisites may be fulfilled by passing a qualifying examination.

Core Courses: (12)

SPT 3800	Introduction to Translation	3
SPT 3812	Introduction to Interpreting	3
SPT 4801	Translation Practica	3
SPT 4802	Oral Translation Practica	3

Required Program Courses: (12)

SPT 4803	Practica in Legal Translation	3
SPT 4804	Practica in Legal Interpretation	3
SPT 4940	Judicial Translation/ Interpretation Internship	3
SPT 4813	The Interpreter and Language	3
SPT 4806	Oral Skills for Interpreters	3

Electives: (6)

BUL 5105	Legal Environment of Business	3
BUL 4111	Business Law I	3
CCJ 3011	The Nature and Causes of Crime	3
CCJ 3020	An Overview of Criminal Justice	3
CCJ 3101	Law Enforcement System	3
CCJ 3290	Judicial Policy Making	3
CCJ 4280	Law and Criminal Justice	3
CCJ 4331	Probation, Parole and Community Program	3
CCJ 4662	Criminal Justice and the Minority Community	3
INR 3403	International Law	3
ORI 3000	Basic Oral Interpretation	3
POS 3283	The Judicial Process	3

Linguistics Studies Certificate Program

Lynn Berk, *Director (English)*
Coordinating Committee
Isabel Castellanos, *(Modern Language)*
Tometro Hopkins, *(English)*
John Jensen, *(Modern Languages)*
Ana Roca *(Modern Languages)*
Peter Machonis, *(Modern Languages)*
Kemp Williams, *(English)*
Feryalk Yavas, *(English)*
Mehmet Yavas, *(English)*

In addition to an M.A. in Linguistics, the University offers a Certificate acknowledging that a student has demonstrated competence in course work pertaining to the study of linguistics. This Certificate is designed to meet the needs of those who have a general interest in linguistics studies, as well as those for whom work in linguistics would assist in career planning or advancement. Both undergraduate and graduate

students are eligible to earn the certificate.

A student can acquire a Certificate in Linguistic Studies by fulfilling the following requirements:

The successful completion of at least six courses in linguistics or linguistics-related courses. These courses are listed below.

Courses must be selected from at least two different departments. Students should consult a Certificate advisor in selecting courses.

With the advice of the Coordinating Committee, the student is encouraged to attain some degree of proficiency in a language other than his or her native language.

In addition to the requirements noted above, all of the requirements for obtaining a bachelor's degree from the University must be met, or the student must possess a bachelor's degree from another institution.

A Coordinating Committee representing various fields, will advise students and grant the Certificate.

A student wishing to earn a Linguistics Studies Certificate will choose courses from the following list of offerings:

Required Courses

LIN 3010	General Linguistics	3
	or	
LIN 3013	General Linguistics	3
	or	
LIN 5018	Introduction to Linguistics	3
LIN 4680	Modern English Grammar	3
	or	
FRE 4800	Contrastive Morphology	3
	or	
SPN 4802	Contrastive Syntax	3
	or	
LIN 5501	English Syntax	3

Four additional courses: (12)

Any course with an LIN prefix fulfills this requirement with the exception of LIN 3670 - Grammatical Usage. Linguistics courses with FOL, FRE, POR, and SPN prefixes also fulfill this requirement. You must receive permission from a Coordinating Committee member to take courses with these prefixes. PHI 4221 (Philosophy of Language), PHI 4222 (Philosophy of Dialogue) and MHF 4302 (Mathematical Logic) also fulfill this requirement.

Professional Language Certificate Program

Isabel Castellanos, *Director (Modern Languages)*

Coordinating Committee

Gisela Casines, *(Associate Dean, Arts and Sciences)*

Maida Watson, *(Modern Languages)*

Theodore R. Young, *(Modern Lnaguages)*

The Professional Language Certificate is a fifteen-credit course of study designed to offer both pre- and post-baccalaureate students, as well as degree-seeking students, specialization in foreign languages applicable to various professional endeavors. The certificate program is divided into separate tracks specified by language and application.

For all students, the certificate represents a way to gain specialized language knowledge. For students pursuing a degree, the certificate should be understood as a complement to the student's major area of study. Non-degree seeking students can use the certificate as a demonstration of their proficiency in specific foreign languages in their professional contexts.

Total credits Required in One Track: 15 semester hours. A grade of "C" or better is required for all courses (C- is not acceptable).

Spanish For Business Track

Prerequsite Courses: Before entering the certificate program, the student must have completed one of the following courses or demonstrated an equivalent language proficiency through examination.

SPN 2200	Intermediate Spanish (Non-native speakers)	3
SPN 2xxx	Introductory Spanish for Native Speakers	3

I. Required Courses: At least 15 semester hours of courses from the following certificate program course listing, or others approved by the certificate program advisor.

SPN 2xxx	Intermediate Spanish II (Non-native speakers)	3
	or	
SPN 2340	Intermediate Spanish for Native Speakers	3
SPN 3301	Review Grammar/Writing (Non-native speakers)	3
	or	
SPN 2341	Intermediate Spanish for Native Speakers	3
SPN 3440	Spanish Business Composition/ Correspondence	3

II. Elective Courses: With program advisor's approval, a maximum of 6 credits may be taken from the following lists, with no more than 3 credits from Section A and 3 credits from Section B. This is a partial list: depending upon specific course content, other courses in International Business, Finance, Marketing, etc., may apply. Students consult the certificate advisor regarding additional courses.

Section A (maximum of 3 credits)

SPN 3244	Advanced Grammar and Composition	3
SPN 3520	Spanish American Culture	3
SPN 4500	Spanish Culture	3
SPT 4807	Practica in Business Translation	3

Section B (maximum of 3 credits)

ECS 3402	The Political Economy of South America	3
ECS 4403	Economics of Latin America	3
FIN 4604	International Financial Management	3
MAN 4600	International Management	3
MAN 4660	Business in Latin America	3

Portuguese For Business Track

Prerequsite Courses: Before entering the certificate program, the student must have completed one of the following courses or demonstrated an equivalent language proficiency through examination.

POR 1131	Portuguese II	5
POR 3230	Accelerated Portuguese I	5

I. Required Courses: courses are to be chosen from the following list in consultation with and approval of the advisor.

POR 2200	Intermediate Portuguese	3
	Or	
POR 3231	Accelerated Portuguese II	5
POR 3420	Review Grammar/ Writing	3
POR 3xxx	Portuguese for Business	3

II. Elective Courses: With program advisor's approval, a maximum of 6 credits may be taken from the following lists, with no more than 3 credits from Section A and 3 credits from Section B. This is a partial list: depending upon specific course content, other courses in International Business, Finance, Marketing, etc., may apply. Students consult the

certificate advisor regarding additional courses.

Section A (maximum of 3 credits)

POR 3400	Advanced Oral Communication	3
POR 3500	Luso-Brazilian Culture	3
PRT 3xxx	Introduction to Translation and Interpretation	3

Section B (maximum of 3 credits)

ECS 3401	The Brazilian Economy	3
ECS 3402	The Political Economy of South America	3
ECS 4403	Economics of Latin America	3
FIN 4604	International Financial Management	3
MAN 4600	International Management	3
MAN 4660	Business in Latin America	3

Public Policy Studies Certificate Program

John F. Stack, *Director (Institute for Public Policy and Citizenship Studies)*

Coordinating Committee:

Harvey A. Averch, *(Public Administration)*

J. Scott Briar, *(Social Work)*

Lisandro O. Perez, *(Sociology/ Anthropology)*

Raul Moncarz, *(Economics)*

Rebecca A. Salokar, *(Political Science)*

The academic Certificate Program in Public Policy Studies is an interdisciplinary certificate program. It provides degree-seeking students with a critical understanding of how public policy is created, how it is implemented, and how it transforms daily life.

Besides providing the students with a wide range of interdisciplinary perspectives on public policy, the certificate program also provides students with practical experience by placing them in internships with public and political organizations in South Florida, Tallahassee, and Washington, D.C. For those students looking for careers in public policy, this experience could well be crucial.

Certificate Requirements

The certificate program requires completion of 21 semester hours of college credit. POS 2042 American Government is recommended as a prerequisite course. All students must then complete a common core of coursework by selecting one course from each of the following three core course categories for a total of nine hours. Then, the student must fulfill the requirements of one of the three internship tracks: Federal Policy, (12 hours), State Policy (12 hours), or Local Policy (12 hours).

Core Courses: (9)

ECO 3021	Economics and Society-Micro	3
	or	
ECO 2023	Principles of Microeconomics	3
ECO 3011	Economics and Society - Macro	3
	or	
ECO 2013	Principles of Macroeconomics	3

One of the following three hour courses:

POS 3424	The Legislative Process	3
PAD 3033	Administrators and the Legislative Process	3
PAD 4223	Public Sector Budgeting	3

Certificate Courses

The following courses fulfill certificate requirements for core courses and those exercising the Local Policy track. This is a partial list. The student should consult with the IPPCS about current course offerings. Other courses may be substituted upon approval of the IPPCS. Transfer students may only transfer up to two courses from institutions previously attended. The program is intended to expand student options, and complement other certificate programs.

Biology

BSC 5825	Wildlife Biology
OCB 5635	Coral Reef Ecology, with lab
PCB 3241	Physiology of Aging
PCB 5358	Everglades Research and Resource Management
PCB 5686	Population Biology
ZOO 3892C	Biology of Captive Wildlife

Business Administration

MAN 3503	Managerial Decision Making
MAN 4711	Corporate Social Monitoring
TAX 4001	Income Tax Accounting
TRA 4320	Transportation Regulations
TRA 4380	Transportation Policy
TRA 4410	Air Transportation
TRA 4411	Airport Management

Civil and Environmental Engineering

ENV 5007	Environmental Planning
ENV 5062	Environmental Health
ENV 5659	Regional Planning Engineering
ENV 5666	Water Quality Management
TTE 5506	Urban Mass Transit and Transportation Planning

Construction Management

BCN 3640	Economic Planning for Construction
BCN 5755	Construction Accounting and Finance

Criminal Justice

CCJ 3290	Judicial Policymaking
CCJ 3300	Correctional Philosophy, Theory and Practice
CCJ 3470	Criminal Justice Planning
CCJ 3501	Juvenile Delinquency, Prevention and Control
CCJ 4453	Methods of Institutional Change
CCJ 5285	Judicial Process and Policy
CCJ 5347	Correctional Intervention Strategies
CCJ 5525	Seminar in Judicial Delinquency

Economics

ECO 3040	Consumer Economics
ECO 4321	Radical Political Economy
ECO 4504	Introduction to Public Finance
ECO 4622	Economic Development of the United States
ECO 4701	World Economy
ECO 4703	International Trade Theory and Policy
ECO 4713	International Macroeconomics
ECO 4733	Multinational Corporations
ECP 3123	Economics of Poverty
ECP 3302	Introduction to Environmental Economics
ECP 3533	Health Systems Economics
ECP 3613	Introduction to Urban Economics
ECP 4203	Introduction to Labor Economics
ECP 4204	Theory of Labor Economics
ECP 4314	Natural Resource Economics
ECP 4403	Principles of Industrial Organization
ECP 4622	Regional Economic Growth Management

Education

EDF 3723	Schooling in America
EDF 4780	The Teacher and the Law
EDF 5852	Educational Developmental Issues in Context: A Multidisciplinary Perspective
EEC 4301	Trends in Early Childhood Education
EEX 5771	Independent Living for the Handicapped
HME 5255	Independent Living for the Handicapped
LEI 3437	Program Development in Parks and Recreation
LEI 5510	Program Administration in Parks and Recreation

Environmental Studies

EVR 3011	Environmental Resources and Pollution
EVR 3013	Ecology of South Florida
EVR 4021	Survey of Environmental Problems I
EVR 4022	Survey of Environmental Problems II
EVR 4211	Water Resources
EVR 4231	Air Resources
EVR 4312	Energy Resources
EVR 5236	Air Pollution Dynamics

Health Services Administration

HSA 3103	Health and Social Service Delivery Systems
HSA 4110	Health Care Organization and Administration
HSA 4113	Issues and Trends in Health Care Delivery
HSA 4140	Program Planning and Evaluation
HSA 4150	People, Power and Politics in Health Affairs
HSA 4420	Legal Aspects and Legislation in Health Care
HSC 4202	Principles and Programs in Public Health

History

AMH 4130	The American Revolution
AMH 4140	The Age of Jefferson
AMH 4160	The Age of Jackson
AMH 4251	The Great Depression
AMH 4560	History of Women in the United States

International Relations

GEO 3602	Urban Geography
GEO 5415	Topics in Social Geography
HFT 3700	Fundamentals of Tourism
INR 3043	Population and Society

Journalism and Mass Communication

ADV 4300	Media Planning
JOU 4108	Public Affairs Reporting
MMC 4609	Public Opinion and the Mass Media
PUR 4100	Writing for Public Relations
PUR 4101	Publications Editing and Design
PUR 4106	Advanced PR Writing
PUR 4934	Public Relations Seminar
PUR 5607	Advertising and Public Relations Management
PUR 5806	Integrated Advertising and Public Relations Planning and Evaluation

Labor Studies

LBS 4401	Collective Bargaining in Industrial Systems
LBS 3001	Introduction to Labor Studies
LBS 4101	Theories of the Labor Movement
LBS 4150	Contemporary Labor Issues
LBS 4210	Women and the Labor Movement
LBS 4461	Labor Dispute Resolution
LBS 4501	Industrial and Labor Relations Law

Landscape Architecture and Architectural Studies

ARC 2304	Architectural Design

Music

MUM 4301	Business of Music
MUM 4302	Business of Music II

Political Science

POS 4071	Corporate Power and American Politics
POS 3153	Urban Politics
POS 3283	The Judicial Process
POS 3413	The Presidency
POS 3424	The Legislative Process
POS 3453	Political Parties
POS 3603	Constitutional Law: Powers
POS 3604	Constitutional Law: Limitations
POS 4122	State Government and Politics
POS 4154	Topics in Urban Politics and Policy
POS 4463	Interest Group Politics
POS 4605	Gender Justice
POS 4930	Topics in Public Law
POT 3204	American Political Thought
PUP 4004	Public Policy: U.S.
PUP 4203	Environmental Politics and the Law
PUP 4323	Women in Politics
PUP 4931	Topics in Public Policy
PUP 5934	Topics in Public Policy

Psychology

CLP 5185	Current Issues in Mental Health
CYP 3003	Introduction to Community Psychology

Public Administration

PAD 3033	Administrators and the Legislative Process
PAD 3034	Public Policy and its Administration
PAD 3804	Government and Administration of Metropolitan Areas
PAD 4103	Politics of Administrative Organizations
PAD 4223	Public Sector Budgeting
PAD 4432	Administrative Leadership and Behavior
PAD 5256	Public Economics

Social Work

SOW 3232	Social Welfare Policy and Services I
SOW 3233	Social Welfare Policy and Services II
SOW 3302	Introduction to Social Work
SOW 4654	Child Welfare
SOW 5109	Crises in the Lives of Women
SOW 5235	Social Welfare Policy and Services
SOW 5641	Understanding the Process of Aging
SOW 5710	Chemical Dependency and Social Work

Sociology and Anthropology

ANT 3442	Urban Anthropology
ANT 4273	Law and Culture
ANT 4406	Anthropology of War and Violence
SYD 4410	Urban Sociology
SYD 4700	Minorities/Race and Ethnic Relations
SYD 4810	The Role of Women in Contemporary Society
SYO 3250	School and Society
SYO 4571	The Problems of Bureaucracy in the Modern World
SYP 3520	Criminology
SYP 3530	Delinquency
SYP 4730	Sociology of Aging

Public Policy Tracks

Federal Policy (Intern Semester - 12 hours)

This internship is offered during the summer and involves the student taking an internship with a governmental,

nongovernmental, or political organization in the nation's capital. The specifics of the internship are agreed upon by the student and the IPPCS advisor and the student receives six semester hours of credit. Like the Tallahassee Internship, the student attends an intensive two week course at FIU before leaving for the internship. While in Washington, all FIU interns are required to attend a course designed to inform them of the workings of public policy on the national and international levels: students receive three hours of credit for a seminar in Washington. Students are responsible for their own room and board, although the Institute assists as much as possible in arranging housing and financial aid. The Washington, D.C. internship option is worth a total of 12 semester hours.

PUP 4004 Public Policy: U.S. 3
(Crosslisted with PAD 3034 Public Policy and its Administration (Pre-internship Seminar)

PAD 4024 Concepts and Issues in Public Administration 3
(Crosslisted with PUP 4931 Topics in Public Policy: Federal Policy Making), to be offered in Washington, D.C.

Supervised Summer Internship in Washington, D.C. 6
Students are to register for the internship, field study or independent study course in their department (e.g., PAD 4940, POS 4944, POS 4941)

State Policy (Intern Semester - 12 hours)

Students with senior status are placed in nonpaying internships in State of Florida government agencies. Advisors from the IPPCS work with students to determine which agency is most suitable, depending upon the student's interests. This internship is held during the Spring Term in order to coincide with the State's legislative session. Students attend an intensive two week introductory course at FIU before leaving for Tallahassee. While in Tallahassee, in addition to their internship responsibilities, which are worth six semester hours, students attend a once a week seminar with other interns. This class will be coordinated by the IPPCS and features guest lecturers from governmental and political organizations. Although the students are responsible for their own room and board, the Institute helps to arrange housing and assists in the application for financial aid. The Tallahassee Internship option is worth a total of 12 semester hours.

PUP 4004 Public Policy: U.S. 3
(Crosslisted with PAD 3034: Public Policy and its Administration (Pre- internship Seminar))

PAD 4024 Concepts and Issues in Public Administration 3
(Crosslisted with POS 4122 State Government & Politics (Seminar), to be offered in Tallahassee.)

Supervised Spring Internship in Tallahassee 6
Students are to register for the internship, field study or independent study course in their department (e.g., PAD 4940, POS 4944, POS 4941)

Local Policy (Intern Semester 12 hours)

This option may be the most viable for those who want to earn the certificate, but who are unable to leave South Florida for an internship. This option is designed to be as flexible as possible. The nature of this option is worked out between the student and the IPPCS advisor. The student receives three credit hours for whichever courses are completed, including a local internship. Courses must be taken in at least two different disciplines, at least one being outside the student's departmental major. Core courses may not count toward the fulfillment of these requirements.

PUP 4004 Public Policy: U.S. 3
Crosslisted with PAD 3034: Public Policy and its Administration (students may enroll in the regular semester course or a pre-internship seminar)

Urban Policy Elective 3
Students may select one of the following:
SYD 4410 Urban Sociology
POS 3153 Urban Politics
or
POS 3283 The Judicial Process
One of the following: (3)
POS 4941 Legislative Internship
PAD 4940 Public Administration Internship
or
POS 4944 Judicial Internship
Certificate Course Elective (3)

Translation Studies Certificate Program

This professional certificate is designed to train students in the techniques and skills needed for the translation (E-S and S-E) of routine documents and general correspondence. It also provides the general background and introductory professional courses needed for future study or work in the field of translation. The program consists of 30 semester hours.

Through its academic track, the certificate program offers complementary studies for the practitioner who wants to strengthen his or her competence in this field.

Prerequisites
ENC 1200 Business Letters and Reports 3

No credits allowed. These prerequisites may be fulfilled by passing a qualifying examination.

Core Courses: (12)
SPT 3800 Introduction to Translation 3
SPT 3812 Introduction to Interpreting 3
SPT 4801 Translation Practica 3
SPT 4802 Oral Translation 3

Required Courses: (9)
FOT 3810 Creative Writing Translation 3
SPT 4803 Practica in Legal Translation 3
SPT 4809 Practica in Medical Translation 3
SPT 4807 Practica in Business Translation 3
SPT 4808 Practica in Technological Translation 3
SPT 4805 Translation in Communication Media 3
SPT 4820 Computer Aided Translation 3
SPT 4941 Professional Internship 3

Restrictive Electives
One course from the following
ENC 2210 Technical Writing 3
SPN 3413 Communication Arts 3
SPN 3520 Spanish American Culture 3

Free Electives
Two Courses from the following
ACG 2021 Accounting for Decisions 3
COP 2172 Programming in BASIC 3
ECO 3021 Economics and Society, Micro 3
ECO 3011 Economics and Society, Macro 3
HUN 2201 Principles of Nutrition 3
INR 3403 International Law 3
JOU 3100 News Reporting 3
MAN 3602 International Business 3
MAN 3701 Business and Society 3
MRE 3001 Medical Terminology 3
MRE 3431 Fundamentals of Medical Science 3

RTV 4302	Broadcasting for Reporting *(Prerequisite JOU 3100)*	3
SYG 3002	The Basic Ideas of Society	3

In addition to these subjects, the free electives may be chosen from the offerings in the departments of Sociology/Anthropology, Communication, Computer Science, Economics, International Relations, Modern Languages, and Political Science by securing the approval of the Director of the Program.

Tropical Commercial Botany Professional Certificate Program

David Lee, *Director* (Biological Sciences)

Coordinating Committee

Bradley Bennett, *(Biological Sciences)*

Richard Campbell, *(Fairchild Tropical Garden)*

Kelsey Downum, *(Biological Sciences)*

Jack B. Fisher, *(Fairchild Tropical Garden)*

Christopher Kernan, *(Biological Sciences)*

Suzanne Koptur, *(Biological Sciences)*

Steven Oberbauer, *(Biological Sciences)*

Jennifer Richards, *(Biological Sciences)*

This Certificate Program provides background in the plant sciences, principally for those with practical experience in horticulture. The curriculum is designed to give solid information on the plants being grown: their anatomy and morphology, reproduction, taxonomy, development and physiology. This back- ground should prepare students for work in the more technical aspects of horticulture in South Florida. Those fulfilling its requirements, along with a B.S. degree in Biological Sciences or Environmental Studies, would have excellent preparation for post-graduate work in Botany or Horticulture.

Certificate Requirements

Lower or Upper Division Preparation;

Two semesters of college-level chemistry;

Mathematics through College Algebra (such as MAC 2132);

Practical Horticultural Experience.

Required Courses: (16)

BOT 3010C	Plant Biology	4
BOT 3353	Morphology of Vascular Plants	4
BOT 4504	Plant Physiology	3
BOT 4504L	Plant Physiology Laboratory	1
BOT 3723C	Taxonomy of Tropical Plants	4

Electives

Two courses from the following (6-8)

BOT 3810	Economic Botany	3
BOT 4314C	Plant Development	4
PCB 3043	Ecology	3
PCB 3043L	Ecology Lab	1
EVR 3010	Energy Flow in Natural and Man-Made Systems	3
ENY 1004	General Entomology	3
ENY 1004L	General Entomology Lab	1
ACG 2021	Accounting for Decisions	3
ARC 3133	Graphic Communication	3
LAA 3350C	Landscape Design I	3

All courses require a grade of 'C' or higher.

Western Social and Political Thought Certificate Program

Stephen M. Fjellman, *Co-Director (Sociology and Anthropology)*

Paul Warren, *Co-Director (Philosophy)*

Coordinating Committee

Eric Leed, *(History)*

Barry Levine, *(Sociology/ Anthropology)*

Ken Rogerson, *(Philosophy)*

The Certificate Program provides interested students with a broad background in the history of western social and political thought. As such, the Certificate student will be expected to take courses from a variety of disciplines and at least three tutorials. Each tutorial will concentrate on one prescribed book which will be the same for all students. At the beginning and end of each semester the students will meet as a group with the instructors in the Program to discuss the different perspectives which they have developed on the common subject matter.

Course Requirements

A total of five courses in prescribed Certificate courses and three tutorials with a grade of 'C' or higher.

Four courses in three historical eras (Ancient-Medieval, Modern, and Contemporary) from at least three different departments (Economics, English, History, Philosophy/Religion, Political Science, Sociology/Anthropology).

IDS 4920, Liberal Studies Colloquium on 'Visions of Order and Revolt'. (Under exceptional circumstances another course may be substituted with the advisor's approval).

Three independent study tutorials taken in three semester blocs.

Admission to the Program

Admission to the program will be by invitation from a member of the certificate faculty, or by request from the student. In either case, final approval for admission rests with the Coordinating Committee of the Certificate Program. GPA, intellectual interests, and academic potential will be the criteria considered for admission to the Program.

Advising

The student's advisor will be the designated Certificate representative in his or her major. It is the function of the Certificate advisor to aid students in the selection of relevant courses, to insure that all Certificate requirements have been completed before graduation, and to assign the tutorial grades. Students who are majoring in a discipline other than those listed will be advised by the Director of the Certificate Program or, by mutual agreement, by another advisor of the students choice. Students are responsible for contacting their advisor on the progress of their coursework and other matters related to completion of Certificate requirements.

Course Listing

The following list may be modified from time to time. The student should consult with his or her advisor about current course offerings.

Ancient-Medieval

HIS 3001	Introduction to History	3
HUM 3214	Ancient Classical Culture and Civilization	3
LIT 4403	Literature Among the Arts and Science[1]	3
PHH 3100	Ancient Philosophy	3
PHH 3200	Medieval Philosophy	3
PHM 3200	Social and Political Philosophy[2]	3
PHM 3400	Philosophy of Law[1]	3
POT 3013	Ancient and Medieval Political Theory	3
POT 4930	Topics in Political Theory [2]	3
POT 5934	Topics in Political Theory [2]	3

Modern

ENL 4320	Shakespeare's Histories	3
ENL 4321	Shakespeare's Comedies	3
ENL 4322	Shakespeare's Tragedies	3
EUH 3142	Renaissance and Reformation	3
EUH 4453	French Revolution and Enlightenment	3
EUH 4286	Topics in European Intellectual History	3

LIT 3200	Themes in Literature	3
LIT 4403	Literature Among the Arts and Sciences	3
PHM 3200	Social and Political Philosophy[1]	3
PHM 3400	Philosophy of Law[1]	3
POT 3054	Modern Political Theory	3
POT 3204	American Political Thought[1]	3
POT 4930	Topics in Political Theory [2]	3
POT 5934	Topics in Political Theory [2]	3

Contemporary

AMH 3331	American Intellectual History[1]	3
ANT 3086	Anthropological Theories	3
ECO 3303	The Development of Economic Thought	3
ECO 4321	Radical Political Economy	3
EUH 4286	Topics in European Intellectual History	3
LIT 4403	Literature Among the Arts and Sciences[2]	3
PHM 3200	Social and Political Philosophy[1]	3
PHM 3400	Philosophy of Law[1]	3
PHP 4510	Marxism	3
POT 3064	Contemporary Political Theory 3	
POT 3302	Political Ideologies	3
POT 3204	American Political Thought[1]	3
POT 4930	Topics in Political Theory [2]	3
POT 5934	Topics in Political Theory [2]	3
SYG 3002	The Basic Ideas of Sociology	3
SYA 4010	Sociological Theories	3
SYO 4300	Political Sociology	3
SYA 4011	Advanced Social Theory	3

[1]Thematic Courses that cover more than one historical period.

[2]Depending on subject taught, these courses may cover one or more than one historical period. Students should consult their advisor before enrolling.

Women's Studies Certificate Program

Marilyn Hoder-Salmon, *Associate Professor and Director, Women's Studies Center*

Lois West, *Women's Studies and Sociology/Anthropology*

Affiliated Faculty:

Janice Allen-Kelsey, *Sociology/Anthropology*

Irma de Alonso, *Economics*

Joan Baker, *English*

Pascale Becel, *Modern Languages*

Michelle Beer, *Philosophy*

Glenda Belote, *Undergraduate Studies*

Lisa Blansett, *English*

Janet Chernela, *Sociology/Anthropology*

Alice Clarke, *Environmental Studies*

Carol Damian, *Visual Arts*

Theresa DiPasquale, *English*

Mary Jane Elkins, *English*

Evelyn Enrione, *Dietetics and Nutrition*

Valerie George, *Dietetics and Nutrition*

Christine Gudorf, *Religious Studies*

Tometro Hopkins, *English*

Rosa Jones, *Social Work*

Ken Johnson, *English*

Sherry Johnson, *History*

Lilly Langer, *Sociology/Anthropology*

Abe Lavender, *Sociology/Anthropology*

Mary Levitt, *Psychology*

Kathleen Martin, *Sociology/Anthropology*

Kathleen McCormack, *English*

Carmen Mendez, *Public Administration*

Betty Morrow, *Sociology/Anthropology*

Adele Newson, *English*

Lesley Northup, *Religious Studies*

Joyce Peterson, *History*

Eleanor Polster, *Management*

Elisabeth Prugl, *International Relations*

Meri-Jane Rochelson, *English*

Rebecca Salokar, *Political Science*

Regina Shearn, *Criminal Justice*

Ellen Sprechman, *English*

Betsy Smith, *Social Work*

Judith Stiehm, *Political Science*

Linda Strong-Leek, *English*

Susan Waltz, *International Relations*

Barbara Weitz, *English*

Margaret Wilson, *Center for Labor Research and Studies)*

The Women's Studies Certificate Program provides an opportunity for students to integrate scholarship about gender from a variety of disciplines into a coherent program of study. The Certificate Program includes a core of required courses central to an understanding of women in a social and historical context.. The courses provide a basic grounding in Women's Studies that should be useful in many other courses and as excellent preparation for graduate study and for careers. The core courses are supplemented by a variety of electives to be chosen according to the particular student's specific interests. The Certificate Program seeks to provide a balance to the traditional academic curriculum and also offers pragmatic vocational learning. Students may enroll in the Certificate Program or take courses as electives either in their major or in any discipline that offers women's studies courses for credit.

A student may acquire the Certificate in Women's Studies by fulfilling the following requirements:

Three required Core Courses from the following:

AMH 4560/ HUM 3225	History of Women in the United States	3
SOP 3742	Psychology of Women	3
SYD 4810	Sociology of Gender	3
LIT 3383	Women in Literature	3
IDS 3930	Foundations of Liberal Studies selected sections or	3
HUM 3930	Female/Male: Women's Studies Seminar	3

Three electives from the following partial list:

AML 4624	African American Women Writers	3
ANT 3302	Male and Female: Sex Roles and Sexuality	3
ANT 3304	Voices of Third World Women	3
ANT 4334	Contemporary Latin American Women	3
ARH 4931	Women in Art	3
CCJ 4663	Women, Crime and the Criminal Justice System	3
ENL 4134	Women in Film	3
LIN 4651	Gender and Language	3
LIN 6937	Gender and Language	3
LIT 4931	Special Topics in Women's Literature	3
MAN 4102	Women and Men in Management	3
PAD 5435	Administration and the Role of Women	3
PHM 4123	Philosophy and Feminism	3
POS 4605	Gender Justice	3
POT 4993	Sex, Power and Politics	3
REL 3145	Women and Religion	3
SOW 5109	Crises in the Lives of Women	3
WST 3010	Introduction to Women's Studies	3
WST 3381	Gay and Lesbian in the US	3
WST 4344	Feminist Theory	3

Every semester additional courses are introduced and periodically special topics courses on gender are offered. The program also offers a Bachelor of Arts in Women's Studies. For information about the major, refer to the women's studies section in the Arts and Sciences undergraduate major section.

The Center is located in DM 212/214, University Park, 348-2408. Students may contact the Women's Studies Center director at the above location, or the Certificate Committee coordinator, North Campus, 919-5859 for further information.

College of Arts and Sciences

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Associate Dean, Curriculum and Advisement	**Fred Bouma**
Associate Dean, College Relations	**Gisela Casines**
Associate Dean, Budget and Planning	**Ivelaw Griffith**
Associate Dean, North Campus,	**Joyce Peterson**
Associate Dean, Faculty and Graduate Studies	**Mark Szuchman**
Director, School of Computer Science	**Samual Shapiro** *(Acting)*
Director, School of Music	**Fredrick Kaufman**

Chairpersons and Program Directors:

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Chemistry	**Kenneth Furton**
Economics	**Panagis Liossatos**
English	**Donald Watson**
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Geology	**Gautam Sen**
History	**William Walker III**
Humanities	**Kenneth Rogerson**
International Relations	**Damian Fernandez**
Latin American and Caribbean Studies	**Eduardo Gamarra**
Liberal Studies	**Janat Parker**
Mathematics	**Enrique Villamor**
Modern Languages	**Isabel Castellanos**
Philosophy	**Paul Warren**
Physics	**Stephan Mintz**
Political Science	**John Stack, Jr.**
Psychology	**Scott Fraser**
Religious Studies	**Nathan Katz**
Sociology and Anthropology	**Stephen Fjellman**
Statistics	**Jie Mi**
Theatre and Dance	**Therald Todd**
Visual Arts	**Carol Damian**
Women's Studies	**Marilyn Hoder-Salmon**

Faculty

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Leed, Eric, Ph.D. *(University of Rochester), Professor, History*

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MacDonald, Charles, Ph.D. *(University of Virginia), Professor, International Relations*

MacFarlane, Andrew W., Ph.D. *(Harvard University), Associate Professor, Geology*

Machonis, Peter A., Ph.D. *(Pennsylvania State University), Associate Professor, Modern Languages*

Maguire, William, M.S. *(Illinois Institute of Technology), Professor, Visual Arts*

Mahler, Sarah, Ph.D. *(Columbia University), Associate Professor, Sociology/Anthropology*

Maingot, Anthony, Ph.D. *(University of Florida), Professor, Sociology/Anthropology*

Makemson, John, Ph.D. *(Washington State University), Professor, Biological Sciences*

Marcus, Phillip, Ph.D. *(Harvard University), Professor, English*

Markham, Michael, Ph.D. *(University of New Mexico), Assistant Professor, Psychology*

Markowitz, Peter, Ph.D. *(College of William and Mary), Assistant Professor, Physics*

Marks, Michelle, Ph.D. *(George Mason University), Assistant Professor, Psychology*

Martin, Kathleen, Ph.D. *(Bryn Mawr College), Associate Professor, Sociology/Anthropology*

Martinez, Juan A., Ph.D. *(Florida State University), Associate Professor, Visual Arts*

Mau, James A., Ph.D. *(University of California-Los Angeles), Professor, Sociology/ Anthropology and Vice Chancellor, State University System*

Maurrasse, Florentin, Ph.D. *(Columbia University), Professor, Geology*

Maxwell, Oren, Ph.D. *(State University of New York-Stony Brook), Professor, Physics*

McClain, Michael, Ph.D. *(University of Washington), Assistant Professor, Environmental Studies*

McCormack, Kathleen, Ph.D. *(University of Miami), Associate Professor, English*

McCoy, Diana, M.A. *(Case Western Reserve University), Instructor, Mathematics*

McElfresh, Clair, D.M.A. *(Case Western Reserve University), Professor Emeritus, School of Music*

McGrath, Campbell, M.F.A. *(Columbia University), Associate Professor, English*

McIntire, Carmela Pinto, Ph.D. *(Michigan State University), Associate Professor, English*

Melchoir, Mary Beth, Ph.D. *(University of Maryland, College Park), Assistant Professor, Politcal Science*

Mendoza, Ramon, Ph.D. *(Freie Universitaet, Berlin), Professor, Modern Languages and Humanities*

Meng Robinson, Cathy, M.M. *(San Francisco Conservatory of Music), Miami String Quartet-in-Residence, School of Music*

Mesbahi, Mohiaddin, Ph.D. *(University of Miami), Associate Professor, International Relations*

Meziani, Abdelhamid, Ph.D. *(Rutgers University), Professor, Mathematics*

Mi, Jie, Ph.D. *(University of Pittsburgh), Associate Professor and Chairperson, Statistics*

Milani, Masoud, Ph.D. *(University of Central Florida), Associate Professor, School of Computer Science*

Milbauer, Asher, Ph.D. *(University of Washington-Seattle), Associate Professor, English*

Mintz, Stephan, Ph.D. *(The Johns Hopkins University), Professor and Chairperson, Physics*

Mitra, Devashish, Ph.D. *(Columbia University), Assistant Professor, Economics*

Molash, Douglas Dean, M.F.A. *(Mankato State University), Assistant Professor, Theatre and Dance*

Montgomery, Marilyn, Ph.D. *(Texas Tech University), Assistant Professor, Psychology*

Morales-Martinez, Zaida C., M.S. *(Pennsylvania State University), Instructor, Chemistry*

Morgan, Dahlia, Diplomate of College Teaching *(University of Florida), Professor, Visual Arts and Director of The Art Museum*

Moran, Gary, Ph.D. *(Katholieke University, Nijmegan, Netherlands, Professor, Psychology*

Moreno, Dario, Ph.D. *(University of Southern California), Associate Professor, Political Science*

Morrow, Betty, Ph.D. *(University of Miami), Associate Professor, Sociology/Anthropology*

Murison, Gerald, Ph.D. *(The Johns Hopkins University), Professor, Biological Sciences*

Nadel, Richard, M.S. *(Northwestern University), Instructor, Mathematics*

Navlakha, Jainendra, Ph.D. *(Case Western Reserve University), Professor, School of Computer Science*

Neal, Leslie, M.A. *(Florida State University), Assistant Professor, Theatre and Dance*

Nelson, Brian, Ph.D. *(University of California-Riverside), Associate Professor, Political Science*

Neumann, Roderick P., Ph.D. *(University of California-Berkeley), Associate Professor, International Relations*

Neus, Jordan, Ph.D. *(University of New York-Stony Brook), Assistant Professor, Statistics*

Norstog, Knut, Ph.D. *(University of Michigan), Research Scientist, Biological Sciences*

Northup, Lesley, Ph.D. *(Catholic University), Associate Professor, Religious Studies*

O'Shea, Kevin E., Ph.D. *(University of California), Associate Professor, Chemistry*

Oberbauer, Steven, Ph.D. *(Duke University), Associate Professor, Biological Sciences*

Okubo, Case, Ph.D. *(University of Guelph), Associate Professor, Biological Sciences*

Olson, Richard, Ph.D. *(University of Oregon), Professor and We Will Rebuild Eminent Scholar, Political Science*

Onuf, Nicholas, Ph.D. *(The Johns Hopkins University), Professor, International Relations and Director of International Studies*

Orta, Michael, M.A. *(University of Miami), Assistant Professor, School of Music*

Osborne, William, Jr., Ph.D. *(Emory University), Associate Professor, Sociology/Anthropology*

Owen, Claudia, Ph.D. *(University of Washington), Lecturer, Geology*

Parker, Janat, Ph.D. *(University of California-Berkeley), Professor, Psychology and Director of Liberal Studies*

Parker, John, Ph.D. *(University of California-Berkeley), Professor, Environmental Studies and Chemistry*

Pasztor, Ana, DRN *(Darmstadt University, West Germany), Professor, School of Computer Science*

Patrouch, Joseph F., Ph.D. *(University of California), Associate Professor, History*

Patterson, Chauncey, B.M. *(The Curtis Institute of Music), Miami String Quartet-in-Residence, School of Music*

Peacock, Walter G., Ph.D. *(University of Georgia), Associate Professor, Sociology/Anthropology*

Pelin, Alexandru, Ph.D. *(University of Pennsylvania), Associate Professor, School of Computer Science*

Perez, Lisandro, Ph.D. *(University of Florida), Associate Professor, Sociology/Anthropology, and Director of Cuban Research Institute*

Pestaina, Norman, M.S. *(Pennsylvania State University), Instructor, School of Computer Science*

Peterson, Brian, Ph.D. *(University of Wisconsin), Associate Professor, History*

Peterson, Joyce, Ph.D. *(University of Wisconsin), Associate Professor, History and Associate Dean, College of Arts and Sciences*

Piantini, Carlos, B.M. *(New York College of Music), Professor, School of Music*

Pitzer, Thomas, M.S. *(Auburn University), Instructor, Biological Sciences*

Pliske, Thomas, Ph.D. *(Cornell University), Lecturer, Biological Sciences and Environmental Studies*

Prabhakaran, Nagarajan, Ph.D. *(University of Queenstand), Associate Professor, School of Computer Science*

Price, Patricia, M.A. *(University of Washington), Assistant Professor,International Relations*

Prugl, Elizabeth, Ph.D. *(The American University), Associate Professor, International Relations*

Pyron, Darden, Ph.D. *(University of Virginia), Professor, History*

Quirke, Martin, Ph.D. *(University of Liverpool), Professor, Chemistry*

Rae, Nicol, D.Phil. *(Oxford University), Associate Professor, Political Science*

Rahier, Jaen, Ph.D. *(University of Paris X-Nanterre), Associate Professor, Sociology/Anthropology*

Ramsamujh, Taje, Ph.D. *(California Institute of Technology), Associate Professor, Mathematics*

Rand, Gary, Ph.D. *(Texas A & M University), Associate Professor, Environmental Studies and Southeast Environmental Research Program*

Ratner, Robert, M.A. *(University of Miami), Instructor, English*

Raue, Brian, Ph.D. *(Indiana University), Assistant Professor, Physics*

Rein, Kathleen, Ph.D. *(University of Miami), Assistant Professor, Chemistry*

Reinhold, Jorg, Ph.D., *(Technische Universitaet Munchen), Assistant Professor, Physics*

Reisert, Laura, M.S. *(University of Florida), Instructor, Statistics*

Reno, William S.K., Ph.D. *(University of Wisconsin), Associate Professor, Political Science*

Rey, Terry, Ph.D. *(Temple University), Assistant Professor, Religious Studies*

Richards, Jennifer, Ph.D. *(University of California-Berkeley), Professor, Biological Sciences*

Richardson, Laurie, Ph.D. *(University of Oregon), Associate Professor, Biological Sciences*

Rishe, Naphtali, Ph.D. *(Tel Aviv University, Israel), Professor, School of Computer Science*

Ritter, David, Ph.D. *(Louisiana State University), Associate Professor, Mathematics*

Robinson, Keith, B.M. *(The Curtis Institute of Music). Miami String Quartet-in-Residence, School of Music*

Robinson, Wayne, M.F.A. *(National Theatre Conservatory), Assistant Professor, Theatre and Dance*

Roca, Ana, D.A. *(University of Miami), Associate Professor, Modern Languages*

Rochelson, Meri-Jane, Ph.D. *(University of Chicago), Associate Professor, English*

Rock, Howard, Ph.D. *(New York University), Professor, History*

Rogerson, Kenneth, Ph.D. *(University of California-San Diego),Professor, Philosophy and Director of Humanities*

Rohm, Joseph, Ph.D. *(Florida State University), Associate Professor, School of Music*

Roller, Barbara, Ph.D. *(University of Pennsylvania), Lecturer, Biological Sciences*

Rosenberg, Mark, Ph.D. *(University of Pittsburgh), Professor, Political Science, and University Provost,*

Rosenthal, Michael, M.S. *(University of Miami), Instructor, Mathematics*

Rotton, James, Ph.D. *(Purdue University), Associate Professor, Psychology*

Roy, Dev, Ph.D. *(University of Rochester), Associate Professor, Mathematics*

Roy, Santanu, Ph.D. *(Cornell University Associate Professor, Economics*

Rubenberg, Cheryl, Ph.D. *(University of Miami), Associate Professor, Political Science*

Rubin, Richard, Ph.D. *(Washington University), Associate Professor, Mathematics*

Rudominer, Mitch, Ph.D. *(University of California-Los Angeles), Assistant Professor, Mathematics*

Rukimbira, Philippe, Ph.D. *(Pennsylvania State University), Associate Professor, Mathematics*

Salazar-Carrillo, Jorge, Ph.D. *(University of California at Berkeley), Professor, Economics and Director, Center of Economic Research*

Salekin, Randell, Ph.D. *(University of North Texas), Assistant Professor, Psychology*

Salokar, Rebecca, Ph.D. *(Syracuse University), Associate Professor, Political Science*

Salvador, Miguel, D.M.A. *(University of Miami), Associate Professor, School of Music*
Sanchez, Juan, Ph.D. *(University of South Florida), Associate Professor, Psychology*
Sanchez, Reinaldo, Ph.D. *(Washington University), Professor, Modern Languages*
Sanders, Roger, Ph.D. *(University of Texas-Austin), Research Scientist, Biological Sciences*
Sandoval, Arturo, Superior Level *(National School of Art, Havana, Cuba), Professor, School of Music*
Sargsian, Misak, Ph.D. *(Yerevan Physics Institute), Assistant Professor, Physics*
Schwartz, Bennett, Ph.D. *(Dartmouth College), Associate Professor, Psychology*
Schwartz, Richard, Ph.D. *(University of Chicago), Professor,English*
Seidel, Andrea, D.A. *(New York University), Associate Professor, Theatre and Dance*
Sen, Gautam, Ph.D. *(University of Texas at Dallas), Professor and Chairperson, Geology*
Shapiro, Samuel S., Ph.D. *(Rutgers University), Professor, Statistics*
Shaw, Gregory, M.S. *(Barry University), Instructor, School of Computer Science*
Sheldon, John, Ph.D. *(Texas A&M University), Professor, Physics*
Sheriff, Robin, Ph.D. *(City University of New York), Assistant Professor, Sociology/Anthroplogy*
Shershin, Anthony, Ph.D. *(University of Florida), Associate Professor, Mathematics*
Shriner, Brian, M.A. *(University of Miami), Instructor, Theatre and Dance-Speech Communcation Program*
Shore, Minna, Ph.D. *(Leningrad Technical Institute), Instructor, Mathematics*
Silverman, Wendy, Ph.D. *(Case Western Reserve University),Professor, Psychology and Director, Child and Family Psychosocial Research Center*
Silverstein, Ronn, M.A. *(Sir George Williams University, Montreal), Instructor, English*
Simpson, Caroline, Ph.D. *(University of Florida), Assistant Professor, Physics*
Sinha, Rakesh, Ph.D. *(University of Washington), Instructor, School of Computer Science*
Skow, Marilyn, M.Ph. *(Columbia University), Associate Professor, Theatre and Dance*
Slifker, James, Ph.D. *(University of Notre Dame), Associate Professor, Mathematics*
Smith Geoffrey, Ph.D., *(Cornell University), Assitant Professor, School of Computer Science*
Smith, Joslyn, M.S. *(University of New Brunswick), Instructor, School of Computer Science*
Sprechman, Ellen, Ph.D. *(University of Miami), Lecturer, English*
Stack, John, Jr., Ph.D. *(University of Denver), Professor and Chairperson, Political Science and Director, Institute for Public Policy and Citizenship Studies*
Standiford, Lester, Ph.D. *(University of Utah), Professor, English and Director, Creative Writing Program*
Stepick, Alex, Ph.D. *(University of California-Irvine), Professor, Sociology/Anthropology and Director, Ethnicity and Immigration Institute*
Stiehm, Judith, Ph.D. *(Columbia University), Professor, Political Science*
Stier, Oren, Ph.D. *(University of California, Santa Barbara), Assistant Professor, Religious Studies*
Stoddard, Philip D., Ph.D. *(University of Washington), Associate Professor, Biological Sciences*
Strong-Leek, Linda, Ph.D. *(Michigan State University), Assistant Professor, English*
Sugg, Richard, Ph.D. *(University of Florida), Professor, English*
Sun, Wei, Ph.D. *(University of Illinois-Chicago Circle), Associate Professor, School of Computer Science*
Sutton, James M., Ph.D *(Yale University), Assistant Professor, English*
Syropoulos, Constantinos, Ph.D. *(Yale University), Associate Professor, Economics*
Szuchman, Mark, Ph.D. *(University of Texas), Professor, History and Associate Dean, College of Arts and Sciences*
Tao, Nongjian, Ph.D. *(Arizona State University), Associate Professor, Physics*
Tachim Medjo, Theordore, Ph.D. *(University of Paris), Assistant Professor, Mathematics*
Tardanico, Richard, Ph.D. *(The Johns Hopkins University), Associate Professor, Sociology/ Anthropology*
Taylor, Clarence, Ph.D. *(Syracuse University), Associate Professor, History*
Taylor, Graham, Ph.D. *(University of California-Berkeley), Assistant Professor, Mathematics*
Thomakos, Dimitrios, Ph. D., *(Columbia University), Assistant Professor, Economics*
Timlick, Lesley-Ann, M.F.A. *(University of California-Davis), Associate Professor, Theatre and Dance*
Todd, Therald, Ph.D. *(University of Oregon), Associate Professor, Theatre and Dance*
Thomakos, Dimitrios, Ph.D. *(Columbia University), Assistant Professor, Economics*
Torres, Manuel, Ph.D. *(University of New Mexico), Associate Professor, Visual Arts*
Torres-Pou, Juan, Ph.D. *(Rutgers University), Assistant Professor, Modern Languages*
Tracey, Martin, Ph.D. *(Brown University), Professor, Biological Sciences*
Trexler, Joel C., Ph.D. *(Florida State University), Associate Professor, Biological Sciences*
Tubman, Jonathan, Ph.D. *(Pennsylvania State University), Associate Professor, Psychology*
Uribe, Victor, Ph.D. *(University of Pittsburgh), Assistant Professor, History*
Vagramian-Nishanian, Violet, Ph.D. *(University of Miami), Professor, School of Music*
Van Hamme, Walter, Ph.D. *(University of Ghent, Belgium), Associate Professor, Physics*
Vickers, William, Ph.D. *(University of Florida), Professor, Sociology /Anthropology*
Villamor, Enrique, Ph.D. *(Washington University), Associate Professor and Chairperson, Mathematics*
Viswesvaran, Chockalingam, Ph.D. *(University of Iowa), Associate Professor, Psychology*
Volcansek, Mary, Ph.D. *(Texas Tech University), Professor, Political Science*
Wagner, Michael J., Ph.D. *(Florida State University), Professor, Music Education, School of Music*
Wakefield, Daniel, B.A. *(Columbia College), Lecturer and Writer-in-Residence, English*
Walker III, William, Ph.D. *(University of California-Santa Barbara), Professor and Chairperson, History*
Waltz, Susan, Ph.D. *(University of Denver), Professor, International Relations*

Wang, Wensheng, Ph.D. *(California Institute of Technology), Assistant Professor, Mathematics*

Wang, Xuewen, Ph.D. *(Iowa State University), Associate Professor, Physics*

Warren, Christopher, D.A. *(Lehigh University), Associate Professor, Political Science*

Warren, Paul, Ph.D. *(University of Wisconsin-Madison), Associate Professor and Chairperson, Philosophy*

Watson, Donald, Ph.D. *(University of Virginia), Professor and Chairperson, English*

Watson-Espener, Maida, Ph.D. *(University of Florida), Professor, Modern Languages*

Watts, Barbara, Ph.D. *(University of Virginia), Associate Professor, Visual Arts*

Waugh, Butler, Ph.D. *(Indiana University), Professor, English*

Webb, James, Ph.D. *(University of Florida), Associate Professor, Physics*

Weeks, Ophelia, Ph.D. *(Howard University), Associate Professor, Biological Sciences*

Weiss, Mark, Ph.D. *(Princeton), Professor, School of Computer Science*

Weitz, Barbara, M.S. *(Florida International University), Instructor, English*

Welch, Marcelle, Ph.D. *(University of Michigan), Professor, Modern Languages and Associate Director of Liberal Studies*

West, Lois, Ph.D. *University of California-Berkeley), Associate Professor, Sociology/ Anthropology and Women's Studies*

Whitman, Dean, Ph.D. *(Cornell University), Associate Professor, Geology*

Wnuk, Stanislaw, Ph.D. *(Adam Michiewicz University, Poland), Associate Professor, Chemistry*

Wilkins, Mira, Ph.D. *(University of Cambridge), Professor, Economics*

Williams, C. Kemp, Ph.D. *(Indiana University), Associate Professor, English*

Willumsen, Maria, Ph.D. *(Cornell University), Associate Professor, Economics*

Winkle, Stephen, Ph.D. *(University of California at Berkeley), Associate Professor, Chemistry*

Witte, Ann D., Ph.D. *(North Carolina State University), Professor, Economics*

Wolfe, Gregory Baker, Ph.D. *(The Fletcher School of Law and Diplomacy), Professor, International Relations*

Wood, Kirsten, Ph.D. *(University of Pennsylvania), Assistant Professor, History*

Yavas, Mehmet, Ph.D. *(University of Kansas), Associate Professor, English and Director, Linguistics*

Young, Theodore, Ph.D. *(Harvard University), Assistant Professor, Modern Languages*

Yudin, Florence, Ph.D. *(University of Illinois), Professor, Modern Languages*

Zahedi-Jasbi, Hassan, Ph.D. *(University of California- Riverside), Associate Professor, Statistics*

Zalkikar, Jyoti N., Ph.D. *(University of California-Santa Barbara), Associate Professor, Statistics*

Zhang, Jiandi, Ph.D. *(Syracuse University), Assistant Professor, Physics*

Zhu, Yifu, Ph.D. *(University of Virginia), Associate Professor, Physics*

Zweibel, John, Ph.D. *(Columbia University), Associate Professor, Mathematics*

College of Business Administration

College of Business Administration

Mission Statement

The College of Business Administration exists to create enduring educational value for our students, for our alumni, and for the business, professional, and academic communities we serve.

For our students—whom we prepare to succeed in a rapidly changing, technology-driven global business environment;

For our alumni—to whom we provide opportunities for continuing professional development and a legacy that appreciates as our excellence grows;

For the business and professional communities—to whom we offer knowledgeable graduates, educational programs, research, and collaborative projects;

For the academic community—to whom we bring new knowledge through high-quality research and the development of future scholars.

Our vision is to create a College of Business Administration that is distinguished among urban public business schools as a center for global business education, technology, and research. Our most noteworthy teaching and research expertise lies in the business arenas linking South Florida, Latin America, and the world economy.

Our College offers undergraduate, graduate, professional education, customized training, and several certification programs to traditional and nontraditional students and to enterprises around the world. While continuing to meet the needs of students in the South Florida community, we are intensifying our educational service delivery to international students and enterprises, especially those in Latin America.

In all of our programs, we strive to instill in students a profound understanding of the changing nature of international business in an integrated global economy. We ensure they are well versed in the impact information technology is having on how enterprises are organized and managed and on how products and services are created and marketed. We provide them with a solid grasp of business processes, the ability to think critically and to solve problems ethically, and the sense to conduct themselves with integrity and within the context of social and environmental responsibility. We foster their commitment to life-long learning in a dynamic, complex, and competitive world.

Our faculty engage in basic and applied research and in instructional development to contribute not only to the general knowledge base in the field of business but also to the ways in which this knowledge is created and shared. Our College boasts a state-of-the-art information technology infrastructure that enables us to provide leading edge instruction and research, including online course delivery. At the same time, our IT investment supports our ongoing curricular innovation in related fields like enterprise-wide computing and logistics.

Organization

The College is organized into the School of Accounting and the Departments of Decision Sciences and Information Systems, Finance, Management and International Business, and Marketing and Business Environment.

The College also houses several centers of excellence dedicated to teaching, research, and service. These include the Jerome Bain Real Estate Institute, the Center for Banking and Financial Institutions, the Ryder Center for Logistics, the Knight Ridder Center for Excellence in Management, the Center for Management Development and Executive Education, The Center for Management in the Americas, the Center for International Business Education and Research, and the Small Business Development Center.

Degree Programs

The College of Business Administration (CBA) offers academic programs leading to the undergraduate degrees of Bachelor of Business Administration (B.B.A.) and Bachelor of Accounting (B. Acc.) and to the graduate degrees of Master of Accounting (M.Acc.), Master of Business Administration (M.B.A.), Master of Science in Finance (M.S.F.), Master of Science in Taxation (M.S.T.), and Doctor of Philosophy in Business Administration (Ph.D.).

Weekend Bachelor of Business Administration

The College offers a Weekend Bachelor of Business Administration (B.B.A.) degree program tailored to meet the needs of working professionals who wish to complete the final two years of their degree in a concentrated time span. As the name suggests, courses are offered during the weekend to enable students to continue to pursue their careers full time. This program, which charges tuition plus additional fees, is limited to a select number of students. Each class admitted to the Weekend B.B.A. program proceeds as a group, in a series of lock-step courses, to meet their degree requirements in two years. Graduates receive a Bachelor of Business Administration degree with a Management major.

Undergraduate Majors

Major programs leading to the Bachelor's degree are offered in Accounting, Finance, International Business, Logistics, Management, Personnel Management, Management Information Systems, Marketing, and Real Estate. Also offered is an "Entrepreneurship" track within the Management major.

Undergraduate Minors

The College offers several minors for undergraduate, non-business students: a minor in Business, a minor in Marketing, and a minor in Entrepreneurship.

Students opting for a minor in business must complete the following five courses (15 credit-hours):

ACG 3024	Accounting for Managers
FIN 3005	Introduction to Business Finance
MAR 3023	Marketing Management
MAN 3025	Organization and Management
CGS 3300	Introduction to Information Systems

The minor in Entrepreneurship is discussed in the "Management and International Business" section of this catalog.

Undergraduate Degree Programs

Admission Requirements

Applicants to the College of Business Adminstration must submit an Application for Admission to the University and follow regular University admission procedures. Applicants must meet the University's re-

quirements for admission before being eligible for admission to College.

To be eligible for acceptance into an undergraduate program in the College of Business Administration, students must have met the following standards:

1. Completed 60 semester hours of course work or have completed the Associate in Arts degree or its equivalent;
2. Satisfied general University requirements for admission, including, in this case, the University's general education requirements: English composition, humanities, social science, natural science and mathematics;
3. Met the University's lower division requirements, including CLAST;
4. Achieved a grade point average of 2.25 (2.50 for Accounting majors) or higher. Business courses taken at Florida International University are not included in this GPA computation;
5. If applicant is an international student whose native language is not English, have achieved a minimum score of 500 on the paper-based TOEFL, 173 on the computer-based TOEFL, or an equivalent score on a comparable examination. [International students should study the "General Admission" requirements for foreign students in the "Admissions" section of this catalog.]

Note: If a student has a GPA of 2.25 (2.50 for Accounting majors) or higher and is deficient in no more than six semester hours of general education requirements, he/she may be accepted into a College undergraduate program with the provision that he/she complete all lower-division deficiencies within two semesters of acceptance.

In addition, students who expect to earn a Bachelor's degree in the College within the equivalent of two years should have completed the following as part of the 60 semester hours of lower-division course work: six credit-hours of accounting; six credit-hours of economics; three credit-hours of calculus; three credit-hours of business statistics; and three credit-hours of computer applications.

Readmission

Students who have been admitted into an undergraduate program in the College, but who have not enrolled in any course at the University for three consecutive semesters (including summer) must complete an application for readmission. Students eligible for readmission are subject to the University's and the College's degree program's regulations in effect at the time of readmission.

Program of Study

Once accepted into an undergraduate program in the College, students must complete a formal "Program of Study" before the end of their first semester of course work. Students with majors in the School of Accounting should call (305) 348-2561 to make a program counseling appointment. Students with majors outside of Accounting should call the College's Advising Service for an appointment—(305) 348-2781 in University Park or (305) 919-5221 at the North Campus.

During these appointments, the College's advisors will help students complete their formal "Program of Study." Any questions about course work and degree requirements will be resolved in establishing this official "Program of Study." If, for some reason, a student has not established an official "Program of Study" at least two semesters before he/she expects to graduate, he/she will no longer be permitted to register for classes.

Upper-division Transfer

Students may be able to transfer previously-earned credit towards upper-division study in the College if 1) the credit was designated as junior or senior level at an accredited, four-year, upper-level institution, and 2) the student earned a grade of "C" or higher, or the credit can be validated by some acceptable measure to verify its equivalence. Students wishing to transfer to the College must be in good standing at their previous school or college.

Change of Major

Students who wish to change from a major in another college or school within the University to a new major within the College of Business Administration must meet the degree requirements in effect at the time of the change of major.

Computer Programming Requirement

Before students can enroll in CGS 3300 (or ACG 4401), they must demonstrate computer programming proficiency. They can meet this requirement by doing any one of the following: 1) successfully completing a lower-division computer programming course; 2) successfully completing CGS 2100 – Introduction to Microcomputers; or 3) providing employer verification of relevant work experience.

Residency Requirement

Students must complete the last 30 semester hours of course work at the University to qualify for an undergraduate degree.

Additional Policies

Undergraduate students majoring in subjects outside the College of Business will not be permitted to apply more than 30 semester hours of business courses toward their degree.

Undergraduate students who register for any graduate business course must be formally admitted to a graduate degree program at the University following the University's admission procedures.

Undergraduate Degree Program Requirements

In general, students who can earn a Bachelor's degree from the College of Business Administration will have completed professional work that includes:

1. Pre-core courses as necessary;
2. Required courses designed to provide students with a common body of knowledge that includes:
   a. Concepts and processes in the production, financing and marketing of goods and services in a business enterprise or organization, both domestically and internationally;
   b. The economic and legal environments of and the ethical, social, and political influences on profit and non-profit organizations;
   c. Concepts and applications in accounting, quantitative methods, computers and management information systems;
   d. Organizational theory and behavior and interpersonal communication;
   e. Administrative and decision-making processes in climates of uncertainty, including policy analysis at the highest management levels.
3. Required courses in major;
4. Approved elective courses.

Academic Standards

To earn an undergraduate degree from the College of Business Administration, all students must:

1. Earn a grade of "C" or higher in all major courses and in core courses within their major area of study.
2. Pass a Readiness Examination before registering in ACG 3301 and ACG 4101.
3. Obtain permission from the Dean before being allowed to enroll more than twice in any College course. The Dean will grant such permission only in those exceptional cases when failure to complete a course successfully can be demonstrated to be unrelated to performance in the course.
4. Satisfy the requirements of their respective programs of study and satisfy all University requirements for graduation.

Students should be sure to read and understand Florida International University's policies regarding "Academic Warnings, Probation, and Dismissals" as described in the "General Information" section of this catalog. These policies apply to all students in the College of Business Adminstration.

In addition to satisfying the degree requirements specified in the University's "General Information" section of the catalog, students in the College of Business Administration must have completed the following course work:

Pre-Core Courses (3 credit-hours each)

ACG 2021	Accounting for Decisions
ACG 3301	Accounting for Planning and Control
CGS 2100	Microcomputer Applications
ECO 2013	Principles of Macroeconomics
ECO 2023	Principles of Microeconomics
STA 2023	Business Statistics
MAC 2233	Calculus for Business and Economics

The courses listed above will be waived if a student received a grade of "C" or higher in the appropriate lower-division courses. However, upper-division credit will not be given for these courses. Students should see a College advisor to determine whether or not these courses should be added to their program of study.

Business Core Courses (42-45 Credit-hours)

The business core courses listed below are required for all undergraduate students in the College of Business Administration. Listed with them are the prerequisites (where applicable) for each of the business core courses.

CGS 3300	Introduction to Information Systems* *Prereq: CGS 2100 or Computer Programming Proficiency*
ACG 3311	Applied Accounting Concepts *Prereq: ACG 2021 and ACG 3301 or its equivalent*
BUL 4310	Legal Environment of Business* *Prereq: Senior Status*
ECO 3431	Applied Macro Economics *Prereq: ECO 2013 and ECO 2023 or its equivalent*
FIN 3403	Financial Management *Prereq: STA 2023 and ACG 2021 or its equivalent*
FIN 4303	Financial Markets and Institutions *Prereq: FIN 3403*
GEB 3113	Entrepreneurship & Organization**
MAN 3025	Organization and Management
MAN 3602	International Business *Prereq: ECO 3431*
MAN 3701	Business in Society *Prereq: ECO 3021 and ECO 3011 or its equivalent*
MAN 4504	Operations Management *Prereq: QMB 3200*
MAN 4722	Strategic Management *Prereq: Graduating Senior*
MAR 3023	Marketing Management
QMB 3200	Applications of Quantitative Methods in Business *Prereq: STA 2023 or its equivalent, CGS 3300, and College Algebra*
SPC 4446	Corporate Communication Theory and Leadership Dynamics

*These courses should not be taken by students majoring in Accounting (see model schedule for Accounting majors in "Accounting" section of this catalog).

**This course may be waived for students majoring in MIS who have more than 120 hours in their program of study.

Prerequisite Requirements

Prerequisite course requirements for entry into upper level courses will be enforced. Students will be adminstratively dropped from courses when they lack the required prerequisite course or courses.

Note: The programs, policies, requirements, and regulations listed in this catalog are subject to continual review in order to meet the needs of the University's various publics and to respond to the mandates of the Florida Board of Regents and the Florida Legislature. Changes may be made without advance notice. Please refer to the "General Information" section of this catalog for the University's policies, requirements, and regulations.

School of Accounting

James H. Scheiner, *Professor and Director*
Rolf Auster, *Professor*
Amelia Baldwin, *Associate Professor*
Delano H. Berry, *Assistant Professor*
Jack L. Carter, *Assistant Professor*
Lucia S. Chang, *Professor*
Lewis F. Davidson, *Professor*
Manuel Dieguez, *Instructor*
Mortimer Dittenhofer, *Professor*
Donald W. Fair, *Instructor and Associate Dean*
Georgina Garcia, *Instructor*
Rosalie C. Hallbauer, *Associate Professor*
Harvey S. Hendrickson, *Professor*
David Lavin, *Associate Professor*
Myron S. Lubell, *Associate Professor*
David Manry, *Assistant Professor*
Kenneth S. Most, *Professor Emeritus*
Leandro S. Nunez, *Instructor*
Robert B. Oliva, *Associate Professor*
Felix Pomeranz, *Professor, Associate Director, and Director, Center for Accounting, Auditing, and Tax Studies*
Leonardo Rodriguez, *Professor*
Ena Rose-Green, *Assistant Professor*
Jerry Turner, *Assistant Professor*
Clark Wheatley, *Assistant Professor*
Richard H. Wiskeman, Jr., *Instructor*
John Wrieden, *Instructor*
Harold E. Wyman, *Professor*
Doria Yeaman, *Associate Professor*

Purpose

The mission of the School of Accounting is:

- To provide students with an up-to-date education in professional accounting with due attention to its quality and timeliness in light of a marketing and regulatory environment continually being affected by rapid changes in technology.
- To provide the professional community in government, industry, and public accounting with graduates who are exceptionally well-qualified professionals at various levels and who will have mastered the techniques necessary to manage in a climate of dynamic change.
- To create a positive climate for students to develop their ethical value system and life long learning.
- To promote pure, applied, and instructional research which expands the boundaries of knowledge, supports the work of practitioners, and welds the latest research results to the latest teaching techniques.
- To support and recognize the development of the faculty regarding their teaching, research, and service responsibilities.
- To support the accounting and other professions in South Florida and elsewhere with life-long learning via short courses, conferences, and published materials designed to hone practitioners' skills in the latest technical and professional developments and in recognizing environmental trends that may affect future practices.
- To provide meaningful knowledge of professional accounting concepts and information to other academic and professional disciplines.
- To support the mission and objectives established by the College of Business Administration and to foster the design and implementation of FIU's strategic and tactical plans.

Bachelor of Accounting (B.Acc.)

The objective of the B.Acc. program is to prepare students for positions in public, private sector, corporate, and governmental accounting. To qualify for positions in public accounting, students must take the CPA examination, which, in Florida, requires an additional 30 credit-hours beyond the B.Acc. degree.

The Bachelor of Accounting program also prepares students to pursue advanced degrees in accounting, business, or law.

Degree Program Requirements (120 credit-hours)

Lower-Division/ Business Pre-Core	60 hours
Upper-Division/ Business Core	39 hours
Accounting Major	21 hours

Lower Division/Pre-Core

The "General Information" section in this catalog describes the lower division requirements. The Business Pre-Core requirements are listed in the first section of this "College of Business Adminstration" chapter. Students must complete all lower division and Business Pre-core requirements no later than the first semester of their third year of undergraduate study.

Upper Division/Business Core

The College's Business Core Requirements are listed in the first section of this "College of Business Adminstration" chapter.

Accounting Major Requirements

ACG 4101	Financial Accounting I
ACG 4111	Financial Accounting II
ACG 4341	Management Accounting
ACG 4401	Accounting Information Systems
ACG 4651	Auditing
BUL 4320	Business Law I
TAX 4001	Income Tax Accounting

All accounting courses must be taken at Florida International University; courses from other universities are not transferable unless approved in advance by the Director of the School of Accounting.

Model Schedule for B.Acc. Major

What follows is a sample schedule for a typical, full-time Bachelor of Accounting major who has completed all 60 semester hours of lower division requirements. Deviations from this schedule must be approved by the Director of the School of Accounting. Students who have a non-business baccalaureate degree also should consult with an Accounting advisor for alternative programs that meet the Florida State Board of Accountancy's requirements.

Semester 1	Semester2
ACG 3311	MAR 3023
FIN 3403	GEB 3112
QMB 3150	MAN 3025
ECO 3431	ACG 4401
Semester 3	**Semester 4**
MAN 3602	ACG 4111
ACG 4101	ACG 4341
BUL 4320	MAN 4504
MAN 3701	FIN 4303
Semester 5	
ACG 4651	
TAX 4001	
MAN 4722	
SPC4446 or Elective	

Academic Standards and Policies

1. Students must earn a minimum grade of 'C' in ACG 3311.
2. Students must earn a minimum grade of 'C' in all 4000-level accounting, business law, and tax courses.
3. Students not achieving a grade of 'C' or better in two enrollments in any course will be dropped automatically from the Accounting program. In extenuating circumstances, students

may be able to continue in the program after filing a written appeal to the Continuation and Retention Committee. Appeals should be addressed to the Director, School of Accounting. A student may have no more than three re-enrollments.

4. Students who wish to take more than two accounting and tax courses in one semester must file a formal request to do so with the Continuation and Retention Committee.
5. Prerequisites for all accounting and tax courses are strictly enforced.
6. Students taking accounting and tax courses are expected to seek counsel from Accounting advisors before registering.
7. Students who work more than 20 hours per week are urged to discuss the composition of their schedule and number of courses they should take with an Accounting advisor before registering.

Decision Sciences and Information Systems

Christos P. Koulamas, *Professor and Chair*
Dinesh Batra, *Associate Professor*
Joyce J. Elam, *Professor, James L. Knight Eminent Scholar, and Dean*
Irma Becerra Fernandez, *Assistant Professor*
Sushil K. Gupta, *Professor*
Joseph T. King, *Lecturer*
George J. Kyparisis, *Professor*
Yair Levy, *Instructor and Online Learning Project Manager*
Tomislav Mandakovic, *Professor*
Kenneth E. Murphy, *Assistant Professor*
Manoel Oliveira, *Instructor and Director of Technology*
Steve Simon, *Assistant Professor*
Larry A. Smith, *Associate Professor*
Nicole Wishart, *Instructor*
Steve H. Zanakis, *Professor*
Peter J. Zegan, *Instructor*

Purpose

The purpose of the Department of Decision Sciences and Information Systems is to provide students with the knowledge and ability to design, develop, and implement information systems that will help enterprises solve their problems effectively. Students will be given a solid foundation in the design, use, and management of database and telecommunications technology. The Department offers courses in management information systems, management science, production and operations management and business statistics at both the graduate and undergraduate levels.

Management Information Systems Major

Undergraduate business students can opt to major in Management Information Systems (MIS). This major provides students with the background they need to give informational support for decision-making in organizations and to understand the impact that information systems have on business enterprises

Graduates will be prepared for entry-level positions in MIS, either in user- or system-oriented departments.

Degree Program Requirements (120 credit-hours)

Lower-Division/ Business Pre-Core	60 hours
Upper-Division/ Business Core	42 hours
Major Courses	15 hours
Elective	03 hours

Lower Division/ Business Pre-Core

The "General Information" section in this catalog describes the lower division requirements. The Business Pre-Core requirements are listed in the first section of this "College of Business Administration" chapter. Students must complete all lower division and Business Pre-Core requirements no later than the first semester of their third year of undergraduate study.

Upper Division/Business Core

The College's Business Core Requirements are listed in the first section of this "College of Business Adminstration" chapter.

Major Courses (3 credit-hours each)

ISM 4113	Systems Analysis and Design
ISM 4210	Data Base Applications
ISM 4151	Systems Management
ISM 4400	Management Support Systems
ISM 4220	Business Data Communications

Elective

Students may choose an elective from one of the following program language courses: C, C++, Pascal, Visual Basic, Visual C++, or JAVA.

Academic Standard

The Department of Decision Sciences and Information Systems requires that students receive a grade of "C" or higher in all courses in order to remain in the degree program.

Finance

Krishnan Dandapani, *Professor and Chair*
Gary Anderson, *Associate Professor*
Joel Barber, *Associate Professor*
Robert Bear, *Professor*
Gerald O. Bierwag, *Ryder System Professor*
Chun-Hao Chang, *Associate Professor*
Robert T. Daigler, *Associate Professor*
Maria E. de Boyrie, *Assistant Professor*
Shahid Hamid, *Associate Professor*
James Keys, *Instructor and M.S.F. Advisor*
Raul Moncarz, *Professor*
Simon Pak, *Associate Professor and Associate Director, Center for Banking and Financial Institutions.*
Ali M. Parhizgari, *Professor and Director, Evening MBA Program*
Arun Prakash, *Professor*
Emmanuel Roussakis, *Professor*
William Welch, *Associate Professor*
John S. Zdanowicz, *Professor and Director, Center for Banking and Financial Institutions, and Director, Jerome Bain Real Estate Institute*

Purpose

The Department of Finance seeks to provide students with solid theoretical and practical knowledge in the areas of banking, corporate finance, investments, portfolio management, financial risk management, financial engineering, financial institutions, markets, and international finance.

Through the Jerome Bain Real Estate Institute, the Department also offers an undergraduate major in Real Estate. Created through a gift from the Educational Foundation of the Realtor Association of Greater Miami and the Beaches, the Institute seeks to be a premier, University-based real estate educational and research center, known for its exceptional expertise in international real estate transactions.

Finance Major

Undergraduate business students can opt to pursue a Finance major. Those who do so graduate prepared to enter positions in corporations, financial institutions, brokerage firms, investment banks, and government. They also are prepared for post-graduate studies in all areas of business.

Degree Program Requirements (120 credit-hours)

Lower-Division/ Business Pre-Core	60 hours
Upper-Division/ Business Core	45 hours
Major Courses	15 hours

Lower Division/Pre-Business Core

The "General Information" section in this catalog describes the lower division requirements. The Business Pre-Core requirements are listed in the first section of this "College of Business Administration" chapter. Students must complete all lower division and Business Pre-Core requirements no later than the first semester of their third year of undergraduate study.

Upper Division/Business Core

The College's Business Core Requirements are listed in the first section of this College of Business Administration chapter.

Major Courses (3 credit-hours each)

FIN 3414	Intermediate Finance
FIN 4324	Commercial Bank Management
FIN 4486	Financial Risk Management—Financal Engineering
FIN 4502	Securities Analysis
FIN xxxx	Students must select another three-semester hour Finance course to complete the major.

Real Estate Major

Degree Program Requirements (120 credit-hours)

Lower-Division/ Business Pre-Core	60 hours
Upper-Division/ Business Core	45 hours
Major Courses	15 hours

Lower Division/Pre-Business Core

The "General Information" section in this catalog describes the lower division requirements. The Business Pre-Core requirements are listed in the first section of this "College of Business Administration" chapter. Students must complete all lower division and Business Pre-Core requirements no later than the first semester of their third year of undergraduate study.

Upper Division/Business Core

The College's Business Core Requirements are listed in the first section of this "College of Business Administration" chapter.

Major Courses (3 credit-hours each)

REE 4023	Real Estate Analysis
REE 4204	Real Estate Financial Analysis
REE 4303	Real Estate Investment

The remaining six credit-hours must be selected from real estate electives or courses approved by a College advisor.

Academic Standard

The Department of Finance requires that students receive a grade of "C" or higher in all courses in order to remain in the degree program.

Management and International Business

Karl O. Magnusen, *Professor and Chair*
Constance S. Bates, *Associate Professor*
Maria Corrales, *Instructor*
Gary Dessler, *Professor*
Herman Dorsett, *Associate Professor*
Dana L. Farrow, *Professor and Associate Dean*
Earnest Friday, *Assistant Professor*
Ronald Gilbert, *Associate Professor*
Richard M. Hodgetts, *Professor*
K. Galen Kroeck, *Professor*
Jan B. Luytjes, *Professor*
Martin Luytjes. *Instructor*
Modesto A. Maidique, *Professor and University President*
J. Randall Martin, *Instructor*
Sherry Moss, *Associate Professor and Associate Director, E.M.B.A. Program*
Stephen L. Mueller, *Assistant Professor*
Eleanor Polster, *Instructor and Graduate Coordinator*
Leonardo Rodriguez, *Professor*
Donald Roomes, *Instructor and Director, Weekend B.B.A. Program*
Ronnie Silverblatt, *Associate Professor*
George Sutija, *Associate Professor*
Anisya S. Thomas, *Associate Professor*
Enzo Valenzi, *Professor*
Mary Ann Von Glinow, *Professor*

Purpose

The Department of Management and International Business seeks to provide undergraduate students with a broad overview of organizational management. It offers a flexible program of courses that emphasizes the most current knowledge in the profession.

Management Major

The Department offers undergraduate students several options for majors within the management discipline. They can select a general Management Major, a Personnel Management Major, an International Business Major, or a Management Major with an Entrepreneurship Track.

The Department also offers co-op and internship opportunities to undergraduate students. To qualify for academic credit in these activities, students must have a 2.75 GPA and approval from the Department Chair.

Degree Program Requirements (120 credit-hours)

Lower-Division/ Business Pre-Core	60 hours
Upper-Division/ Business Core	45 hours
Major Courses	15 hours

Lower Division/Pre-Business Core

The "General Information" section in this catalog describes the lower division requirements. The Business Pre-Core requirements are listed in the first section of this "College of Business Administration" chapter. Students must complete all lower division and Business Pre-Core requirements no later than the first semester of their third year of undergraduate study.

Upper Division/Business Core

The College's Business core Requirements are listed in the first section of this "College of Business Administration" chapter.

Major Courses (3 credit-hours each)

Students should note that not all courses with a MAN prefix are actually management courses. Therefore, they should consult with a College advisor to confirm that their program of study reflects the degree requirements.

Undergraduate students majoring in Management should select their 15 credit hours from the 4000-level courses listed below.

MAN 4064	Dilemmas of Responsibility in Business Management
MAN 4102	Women and Men in Management
MAN 4120	Intergroup Relations in Organization
MAN 4142	Managerial Decision Styles
MAN 4151	Behavioral Science in Management
MAN 4201	Organization Theory
MAN 4301	Personnel Management
MAN 4320	Personnel Recruitment and Selection
MAN 4322	Personnel Information Systems
MAN 4330	Wage and Salary Administration
MAN 4401	Collective Bargaining
MAN 4600	International Management
MAN 4802	Small business Management
MAN 4xxx	Global Leadership
MAN 4xxx	Management of Multimedia Enterprise

Personnel Management

Degree Program Requirements (120 credit-hours)

This major is designed for students interested in human resource management. To fulfill this major, students must meet their basic requirements of 60 hours of Lower Division credit-hours and 45 credit-hours of Business Core courses. In addition, they must take 15 credit-hours selected from the following list:

MAN 4301	Human Resource Management
MAN 4320	Personnel Recruitment and Selection
MAN 4330	Wage and Salary Administration.
MAN 4401	Collective Bargaining
MAN 4410	Union-Management Relations
MAN 4xxx	Management of Multimedia Enterprise

International Business

Degree Program Requirements (120 credit-hours)

This major provides students with an intensive, in-depth study of the international dimensions of business. To fulfill this major, students must meet their basic requirements of 60 hours of Lower Division credit-hours and 45 credit-hours of Business Core courses. In addition, students must complete the following four courses and an additional 3 credit-hour elective to fulfill their 15 credit-hours of major courses.

Required Courses (3 credit-hours each)

FIN 4615	International Banking **or**
FIN 4604	International Finance
MAN 4600	International Management
MAN 4633	Strategic Management in Multinational Corporations
MAR 4156	International Marketing

Electives (3 credit-hours each)

The elective must be chosen from the following courses:

ACG 4251	International Accounting
ECO 4701	World Economy (ECO 5709 is an acceptable substitute)
ECO 4733	Multinational Corporation (ECO 5735 is an acceptable substitute)
FIN 4604	International Financial Management

FIN 4614	International Capital Markets
FIN 4615	International Banking
MAN 4610	International and Comparative Industrial Relations
MAN 4613	International Risk Assessment
MAN 4629	International Business Internship
MAN 4660	Business in Latin America
MAN 4xxx	Global Leadership
MAN 4xxx	Management of Multimedia Enterprise
MAR 4144	Export Marketing
TRA 4721	Global Logistics

In some instances and with approval from the Department Chair before registration, one of the following two courses also could satisfy the elective requirement:

MAN 4671	Special Topics in International Business
MAN 4690	Independent Study in International Business

Entrepreneurship Track

The Entrepreneurship Track is designed for students interested in developing new business initiatives and in acquiring self-reliance in the business world.

Students in this track must take the following four courses towards their 15 credit-hours of major courses and participate in a 30-hour intership program:

FIN 4345	Credit Analysis and Loan Evaluation
MAN 4802	Small Business Management
MAR 4853	Marketing Strategy
MAN 4930	Special Topics in Management

Students will intern in a small, entrepreneurial business. As part of their internship, they will be required to write a complete analysis of the business, including recommendations for change and for the business' future direction. Students must see the Entrepreneurship coordinator for information and intership registration.

Entrepreneurship Minor for Non-Business Students

Non-business students wishing to earn a minor in Entrepreneurship must complete the following courses:

GEB 3113	Entrepreneurship
ACG 3024	Accounting for Managers and Investors
FIN 3140	Personal Financial Management
MAN 4802	Small Business Management
MAR 3023	Marketing Management

Academic Standard

The Department of Management and International Business requires that students receive a grade of "C" or higher in all courses in order to remain in a degree program.

Marketing and Business Environment

J.A.F. Nicholls, *Professor and Chair*
Deborah Cohen, *Associate Professor*
Ira Dolich, *Lecturer*
Sally Gallion, *Assistant Dean*
Dennis J. Gayle, *Associate Professor*
Jonathan N. Goodrich, *Professor*
William M. Goodwin, *Lecturer and Director, Ryder Center for Logistics*
Barnett A. Greenberg, *Professor*
Judy Harris, *Assistant Professor*
Robert Hogner, *Associate Professor*
Carl Kranendonk, *Instructor*
Walfried Lasser, *Associate Professor*
Tiger Li, *Assistant Professor*
Paul Miniard, *BMI Professor of Marketing*
Marta Ortiz, *Instructor*
Karen Paul, *Professor and Associate Dean*
Lynda Raheem, *Instructor and Assistant Dean*
Louis Remmer, *Instructor*
H.Paul Root, *James K. Batten Eminent Scholar in Strategic Management, Lecturer, and Director of the Knight Ridder Center for Excellence in Management*
Sydney Roslow, *Professor Emeritus*
Bruce Seaton, *Associate Professor*
Philip Shepherd, *Associate Professor*
Kimberly Taylor, *Assistant Professor*
John Tsalikis, *Associate Professor*

Purpose

The Department of Marketing and Business Environment seeks to provide undergraduate students with a solid understanding of business activities under the marketing umbrella—from the indentification and selection of target markets, to the development, pricing, placement and promotion of goods and services, to the management of relationships among business partners and their customers.

The Department offers a major and a minor in Marketing, and through the Ryder Center for Logistics, a major in Logistics.

Marketing Major

Students who opt to major in marketing will be given a broad foundation in marketing concepts and practices in their contemporary contexts and opportunities to pursue greater depth of understanding in selected areas of the discipline. These areas include sales, advertising, distribution and logistics, and international marketing.

Graduates with a major in marketing are qualified for positions in sales, middle management, and marketing research. They also are prepared for graduate or professional education.

Degree Program Requirements (120 crdit-hours)

Lower-Division/	
Business Pre-Core	60 hours
Upper-Division/	
Business Core	45 hours
Major Courses	15 hours

Lower Division/Pre-Business Core

The "General Information" section in this catalog describes the lower division requirements. The Business Pre-Core requirements are listed in the first section of this "College of Business Administration" chapter. Students must complete all lower division and Business Pre-Core requirements no later than the first semester of their third year of undergraduate study.

Upper Division/Business Core

The College's Business Core Requirements are listed in the first section of this "College of Business Administration" chapter.

Major Courses (3 credit-hours each)

Undergraduate students majoring in marketing must complete 15 credit hours of 4000-level marketing course work, of which the following nine credit-hours are required:

MAR 4503	Consumer Behavior
MAR 4613	Marketing Research
MAR 4803	Cases in Marketing Management

Students can fulfill the other six credit-hours with classes from the list below; however, they should consult with their College advisor before selecting their other two courses:

MAR 4025	Marketing of Small Business Enterprises
MAR 4144	Export Marketing
MAR 4156	International Marketing
MAR 4203	Marketing Channels
MAR 4213	Transportation Logistics
MAR 4231	Retailing Management
MAR 4232	Cases in Retailing Management
MAR 4323	Advertising Management
MAR 4333	Promotional Strategy
MAR 4334	Advertising Campaign Management
MAR 4400	Personal Selling
MAR 4403	Sales Management
MAR 4853	Marketing Strategy
MAR 4941	Marketing Internship
MAR 4949	Cooperative Education in Marketing

Logistics Major

The Ryder Center for Logistics offers a logistics major to undergraduates pursuing their Bachelor of Business Administration. Students who opt to major in logistics will study a wide range of topics, including distribution channels, materials planning, purchasing, warehousing, inventory management, transportation, global sourcing and logistics, and strategic logistics management.

Degree Program Requirements (120 credit-hours)

Lower-Division/	
Business Pre-Core	60 hours
Upper-Division/	
Business Core	45 hours
Major Courses	15 hours

Lower Division/Pre-Business Core

The "General Information" section in this catalog describes the lower division requirements. The Business Pre-Core requirements are listed in the first section of this "College of Business Administration" chapter. Students must complete all lower division and Business Pre-Core requirements no later than the first semester of their third year of undergraduate study.

Upper Division/Business Core

The College's Business Core Requirements are listed in the first section of this "College of Business Administration" chapter.

Major Courses (3 credit-hours each)

TRA 4012	Principles of Transportation
TRA 4202	Logistics Technology
TRA 4203	Principles of Logistics
TRA 4214	Logistics Strategy
TRA 4721	Global Logistics

Marketing Minor

Qualified undergraduate students who are not business majors and who have a 2.50 cumulative GPA must apply to the College of Business Administration to request a minor in Marketing.

To earn a minor in Marketing, students must complete 15 credit-hours of course work as follows:

Required Courses

MAR 3023	Marketing Management
MAR 4503	Consumer Behavior

In addition, students must select and complete any three of the courses listed below:

MAR 4025	Marketing of Small Business Enterprises
MAR 4144	Export Marketing
MAR 4156	International Marketing
MAR 4203	Marketing Channels
MAR 4231	Retailing Management
MAR 4323	Advertising Management
MAR 4333	Promotional Strategy
MAR 4334	Advertising Campaign Management
MAR 4400	Personal Selling
MAR 4403	Sales Management
MAR 4613	Marketing Research
MAR 4803	Cases in Marketing Management
MAR 4853	Marketing Strategy

MAN 4065 or MAN 4731 may be substituted for one of the three marketing electives; however, both courses cannot be taken for credit toward the Marketing Minor.

Academic Standard

The Department of Marketing and Business Environment requires that students receive a grade of "C" or higher in all courses in order to remain in a degree program.

Course Descriptions

Definition of Prefixes:

ACG-Accounting; BAN-Banking; BUL-Business Law; CGS-Computer and Information Systems; ECO-Economics; FIN-Finance; GEB-General Business; ISM-Information Systems Management; MAN-Management; MAR-Marketing; QMB-Quantitative Methods in Business; REE-Real Estate; SPC-Speech; TAX-Taxation; TRA-Transportation.

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

Departmental or School/College Prefixes:

AC - School of Accounting
AS – College of Arts & Sciences
BA - College of Business Administration
DS - Decision Sciences and Information Systems
EC - Department of Economics
FI - Finance
MA - Management and International Business
ME - Marketing and Business Environment
MS - Mathematical Sciences
TD – Theatre and Dance

ACG 2021 Accounting for Decisions (AC) (3). Accounting concepts and analyses essential to determining the income and financial position of a business enterprise. Prerequisites: ECO 3021, ECO 3011, STA 2023, or equivalent and sophomore standing. (F,S,SS)

ACG 3024 Accounting for Managers and Investors (AC) (3). Introduction to the principles used in measuring organization activities. For non-business majors only. (F,S)

ACG 3301 Accounting for Planning and Control (AC) (3). Use of accounting concepts, analyses, and financial data to aid in the evaluation of the business enterprise; and to aid management in its planning, organizing, and controlling functions. Prerequisites: ACG 2021 or equivalent with a grade of 'C' or higher, and successful completion of a readiness examination. (F,S,SS)

ACG 3311 (AC) Applied Accounting Concepts (3). A continuation of ACG 2021 and ACG 3301. A case study course exploring uses of accounting information, financial statement analysis and ethical issues in accounting. Prerequisites: ACG 2021 and ACG 2071 (or equivalent within one year with grades of 'C' or higher of upper division work. Must be taken in first 30 hours of upper division work. (F,S,SS)

ACG 4101 Financial Accounting I (AC) (3). Underlying concepts and ethical, regulatory and business environment of financial reporting with emphasis on measurement, analysis and interpretation of income, cash flows and financial position. Prerequisites: Calculus I with a grade of 'C' or higher, ACG 3311 with grade of 'C' or higher within one year, successful completion of a readiness examination, and junior standing. (F,S,SS)

ACG 4111 Financial Accounting II (AC) (3). Underlying concepts and ethical, regulatory, and business environment of financial reporting with emphasis on measurement, analysis and interpretation of financial position. Prerequisite: ACG 4101 with grade of 'C' or higher. (F,S,SS)

ACG 4251 International Accounting (AC, MA) (3). Comparative analysis of accounting concepts and practices in different countries; international accounting standards; problems of accounting for multinational corporations, including transfers of funds and income measurement; and the role of accounting in national economic development. Prerequisites: CGS 2060 or equivalent. ACG 3301 with a grade of 'C' or higher.

ACG 4341 Management Accounting (AC) (3). Determination and control of production costs, job order and process systems, actual and standard costs; budgetary control; performance measurement; ethics; accounting for state and local governments. Prerequisites: ACG 4111 with a grade of 'C' or higher and ability to work with spreadsheet provides for better scheduling. (F,S,SS)

ACG 4401 Accounting Information Systems (AC) (3). Use of computers in accounting systems, emphasizing hands-on use of operating system, word processing, spreadsheet, data base management, communications and other software in accounting. Prerequisites: CGS 2100 or equivalent. (F,S,SS)

ACG 4651 Auditing (AC) (3). Standards and procedures of auditing financial information, ethics and responsibilities of auditors, collection and documentation of audit evidence, reporting and international auditing standards. Prerequisite: ACG 4111 with a grade of 'C' or higher. (F,S,SS)

ACG 4692 Accounting Information Presentation (AC) (3). Seminar in the development and presentation of oral and written information as required by authoritative standards and pronouncements in accounting and auditing. Prerequisites: ACG 4651 and ACG 4341 with grades of 'C' or higher.

ACG 4821 Accounting and Social Responsibility (AC) (3). Ethical and social responsibilities of accountants with emphasis on professional ethics in corporate, government and public accounting structure and practices and their effects on employees, environment and community. Prerequisites: ACG 4341 ACG 4651 with grades of 'C' or higher.

ACG 4901 Independent Study in Accounting (AC) (1-3). Individual conferences, supervised readings, and reports on personal investigations.

ACG 4931 Special Topics in Accounting (AC) (1-3). For groups of students who wish an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Prerequisite: Permission of the Director of the School of Accounting.

BUL 4310 The Legal Environment of Business (AC) (3). The course includes issues such as: Contracts, Torts, Legal/Political/Economic aspects of Ethics and the Law, U.C.C., Antitrust Law, Employment Law, Administrative Law, Securities Law, and International Business Law topics. Prerequisite: Senior standing. (F,S,SS)

BUL 4320 Business Law I (AC) (3). Substantive issues and principles of business law, including: the American legal system, torts, contracts, Uniform Commercial Code sales, property law, credit and secured transactions, and ethical issues in business law. (F,S,SS)

BUL 4650 Special Topics in Business Law (AC) (1-6). Intensive study for groups of students of a particular topic, or a limited number of topics, not otherwise offered in the curriculum. Prerequisite: Permission of the Director of the School of Accounting.

BUL 4904 Independent Study in Business Law (AC) (1-6). Individual conferences; supervised readings; reports on personal investigations. Prerequisite: Permission of the Director of the School of Accounting.

CGS 3300 Introduction to Information Systems (DS) (3). Survey major information systems (I.S.) problems in organizations. Brief study of basic computer concepts; I.S. development cycle; relation of I.S. and decision-making; microcomputer database, spreadsheet and wordprocessing business applications. Prerequisite: CGS 2060. (F,S,SS)

ECO 2013 Principles of Macroeconomics (EC) (3). Introduction to economic analysis of the overall economy, national income accounting, unemployment, inflation, monetary and fiscal policies, budget deficits and debt, long-run growth. (F,S,SS)

ECO 2023 Principles of Microeconomics (EC) (3). Introduction to economic analysis of individual units—households, and firms. Operation of markets; supply and demand analysis. (F,S,SS)

ECO 3431 Applied Macroeconomics (EC) (3). Aggregate economic performance and business conditions analysis, nature and causes of economic expansions and recessions, inflation, balance of trade, balance of payments, and exchange rate problems, fiscal and monetary policies, short-run instability and long-run growth. Cannot be taken for credit concurrently with, or after taking ECO 3203. Prerequisites: ECO 2013 or ECO 3011. (F,S,SS)

FIN 3005 Introduction to Business Finance (3). Application of financial management to organizations. Analysis of financial statements, cash budgeting, time value of money, etc. Prerequisite: ACG 2021. (F,S,SS)

FIN 3105 Personal Investment Management (FI) (3). An introductory course to acquaint individuals with basic principles of investments. Topics include the buying and selling of stocks, bonds, and commodities. The operation of markets and planning for risks and returns.

FIN 3140 Personal Financial Management (FI) (3). An introductory course to help individuals achieve their personal financial goals. Topics include personal budgeting, taxes, credit, major expenses, insurance, investments, and retirement planning.

FIN 3403 Financial Management (FI) (3). A study of financial decision making in the corporate form of enterprise. An analysis of the sources and uses of funds. Emphasis is placed on working capital management; capital budgeting techniques; short and long term financing; and capital structure and the value of the firm. Prerequisite: ACG 2021 and STA 2023 or equivalent. (F,S,SS)

FIN 3414 Intermediate Finance (FI) (3). Special topics and case problems in financial management. Prerequisite: FIN 3403 or equivalent. (F,S,SS)

FIN 3652 Asian Financial Markets and Institutions (FI) (3). The course provides students, who are interested in Asia, an exposure to Asian financial market practices and institutional framework. The materials discussed provide a basic framework for the non-finance student to understand the basic concepts and tools of financial markets and institutions, and the specific intricacies of the various Asian countries and their institutional practices.

FIN 3949 Cooperative Education in Finance (FI) (3). Semesters of full-time classroom study are alternated with semesters of full-time remunerated employment which closely relates to the student's area of academic study. Carefully designed and monitored work assignments are intended to develop the student's understanding of the relationship between theory and practice in an authentic work environment. Prerequisite: Approval of Chairperson. (F,S,SS)

FIN 4303 Financial Markets and Institutions (FI) (3). Financial markets and the role of financial intermediaries in these markets. Emphasis will be upon the objectives and policies of financial intermediaries within the constraints of law and regulatory authorities. Prerequisite: FIN 3403 or equivalent. (F,S,SS)

FIN 4324 Commercial Bank Management (FI) (3). The management of bank assets and liabilities; specialized banking functions; and the role of the commercial bank in financing business. Prerequisite: FIN 3403 or equivalent. (F,S,SS)

FIN 4345 Credit Analysis and Loan Evaluation (FI) (3). Topics to include: introduction to commercial lending; secured lending; accounts receivable financing and factoring; inventory financing; introduction to lending vehicles; short term lending; domestic taxation; consolidations; forecasting and intermediate term cash flow lending; term loan agreements/covenants; subordinations and guarantees; foreign exchange; international transactions and leasing. Prerequisite: FIN 3403. (F)

FIN 4404 Policies for Financial Management (FI) (3). The process of securing and allocating funds within the organization, with emphasis on the relevant financial decision-making and policy aspects. Prerequisite: FIN 3414 or equivalent. (S)

FIN 4435 Capital Budgeting Techniques and Applications (FI) (3). The application of contemporary theory and techniques to the problem of long term resource allocation. A review of capital budgeting techniques and the implications the investment and management of capital have toward the goal of maximizing the value of the firm. Prerequisite: FIN 3414 or equivalent. (F)

FIN 4461 Financial Statement Analysis (FI) (3). This course explores methods of deriving information from financial statements, including both published documents and privately prepared reports, that would be of interest to lenders and investors. Extensive use is made of computer assisted financial planning forecasting models. Prerequisite: FIN 3403. (on demand)

FIN 4486 Financial Risk Management-Financial Engineering (3). A survey of financial instruments used for financial risk management, including forwards, futures, options and swaps. Emphasis is on identification of financial risks and designing optimal risk management program. Prerequisites: FIN 4303 and FIN 3414. (S)

FIN 4502 Securities Analysis (FI) (3). The examination of the determinants of the values of common and preferred stocks, bonds, and warrants. The timing of security purchases and sales and an introduction to portfolio construction techniques. Prerequisite: FIN 3414 and QMB 3200. (F,S,SS)

FIN 4503 Futures Markets (FI) (3). This course covers the institutional, speculative, and hedging concepts associated with futures markets. Individual and institutional uses of these markets are examined, with the emphasis on the risk-return aspects of the futures and cash markets. Prerequisites: FIN 3414 or FIN 4502 or FIN 4303. (S)

FIN 4504 Portfolio Analysis and Management (FI) (3). Financial theories will be applied to the construction of portfolios. Portfolio management techniques will be analyzed in regard to the goals of individuals, corporations, and various financial institutions. Prerequisite: FIN 4502 or equivalent. (F)

FIN 4515 Options Markets (FI) (3). An examination of the risk-return structure of options on stocks, indexes, debt, and futures. An examination of the structure of these markets and strategies for their use in portfolios. Prerequisite: FIN 4502. (F)

FIN 4604 International Financial Management (FI,MA) (3). Capital budgeting operational analysis and financial decisions in the multinational context. Working capital management and intrafirm fund transfers. Measurement and evaluation of the risk of internationally diversified assets. Prerequisite: FIN 3403 or equivalent. (F,S,SS)

FIN 4613 International Trade Financing Techniques (FI, MA) (3). Alternative methods of financing exports and associated risks. Flexibility and adaptability of letters of credit to special transactions. Types of financial arrangements available to importers and bank considerations in the extension of credit. Role and importance of governmental and quasi-governmental organizations such as the Export-Import Bank, Foreign Credit Insurance Association (FCIA), Overseas Private Investment Corporation (OPIC), and Private Export Funding Corporation (PEFCO). Prerequisite: FIN 3403.

FIN 4614 International Capital Markets (FI,MA) (3). The world's major non-U.S. stock exchanges; international diversification and the international capital asset pricing model; foreign exchange markets and Euro-currency markets. Prerequisite: One of the following courses: FIN 4303, FIN 4502, FIN 4503, or FIN 4604. (F)

FIN 4615 International Banking (FI) (3). Introductory survey of issues that deal with international aspects of banking. The course provides an overview of the structure and operation of the international banking function, the services offered, supporting documentation, and measures to improve the efficiency and effectiveness of the international banking organization. The purpose of the course is to acquaint the students with the daily activities in international banking. Prerequisite: FIN 4324 or. permission of the instructor. (F)

FIN 4621 Risk Analysis in International Lending (FI, MA) (3). Analyzing foreign loan requests and evaluating risk. Measuring and managing country exposure. Role of regulatory authorities in promoting diversification of international credits. Maximizing long-run profitability to the international loan portfolio taking funding options into consideration.. Prerequisite: One of the following - FIN 4303, FIN 4502, FIN 4503, or FIN 4604. (on demand)

FIN 4904 Independent Study in Finance (FI) (1-6). Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and Department Chairperson required. (F,S,SS)

FIN 4934 Special Topics in Finance (FI) (1-6). For groups of students who desire an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required. (F,S,SS)

FIN 4941 Finance Internship (FI) (1-3). Full-time supervised work in a selected bank or other organization in the area of finance. Prerequisites: At least 12 hours of finance, consent of instructor, and department chairperson. (F,S,SS)

FIN 4949 Cooperative Education in Finance (FI) (3). Semesters of full-time classroom study are alternated with semesters of full-time remunerated employment which closely relates to the student's area of academic study. Carefully designed and monitored work assignments are intended to develop the student's understanding of the relationship between theory and practice in an authentic work environment. Prerequisite: Approval of Chairperson. (F,S,SS)

GEB 2011 Introduction to Business (MA) (3). Introduction to the business world, including the functions of business and management. Examination of the free enterprise system, forms of business ownership and the role of business in society. (F)

GEB 3113 Entrepreneurship and Organization (MA) (3). An introduction to the general theories, principles, concepts and practices of entrepreneurship. Heavy emphasis is placed on lecture, readings, case studies and group projects. (F,S,SS)

GEB 3935 Career Planning and Management (MA) (1). Course will respond to the need for students to make sound career decisions. Students will be able to prepare for success in a changing work environment and to use the skills introduced to cope with career decision-making.

ISM 3012 Introduction to Decision and Information Systems (3). Understanding how computer systems can be used to improve decision making. Includes applications and impacts of IS, databases, decision support systems, production planning and control systems, and resource allocations systems. Not available to business majors.

ISM 3949 Cooperative Education in Management Information Systems I (DS) (1-3). A program enabling MIS majors to work in jobs significantly related to their major area and career goals. Placement must be approved by instructor. (F,S,SS)

ISM 4113 Systems Analysis and Design (DS) (3). Topics include: information systems concepts; the structure, design, and development of the data base; and techniques and procedures used in the analysis and design of systems projects. Prerequisite: ISM 4210. (F,S,SS)

ISM 4151 Systems Management (DS) (3). An in-depth, case-oriented, study of the problems encountered in the management of systems projects. Analyst-user conflicts, communication problems within the systems department, computer evaluation and selection techniques, computer negotiations and contracts, and project management are covered in detail. Where appropriate, field study investigating a topical area will be carried out by each student. Prerequisite: ISM 4113. (F,S,SS)

ISM 4210 Data Base Applications (DS) (3). Application of the data base technology and concepts to organization problems. Includes DBMS components; hierarchic, network and relational approaches to DBMS design. Hands on experience with a DBMS. Prerequisite: CGS 3300 and CGS 3403 or COP 2120. (F,S,SS)

ISM 4220 Business Data Communications (3). Application of telecommunication technology and concepts to organizational problems. Includes components of telecommunication network, management of a network, and issues related to installing and managing interorganizational systems. (F,S,SS)

ISM 4340 Organizational Impacts of Information Systems (DS) (3). Investigation of the human and organizational factors relevant to design and implementation of information systems in complex organizations. Prerequisites: MAN 3025 and CGS 3300. (F,S)

ISM 4400 Management Support Systems (3). Understanding of how Decision Support Systems (DSS) and Expert Systems (ES) support decision making in organizations. Includes architecture of a DSS/ES and how these systems are developed. Hands-on experience with DSS tools. Prerequisites: CGS 3300 and ISM 4210. (F,S)

ISM 4949 Cooperative Education in Management Information Systems II (DS) (1-3). A continuation of ISM 3949. A program enabling MIS majors to work in jobs significantly related to their major area and career goals. Placement must be approved by instructor. Prerequisite: ISM 3949. (F,S,SS)

MAN 3025 Organization and Management (MA) (3). An analysis of organizations and the management processes of planning, organizing, directing, and controlling in the context of socio-technical systems. Individual, group, intergroup, and organizational responses to various environments and technologies are studied, as are pertinent techniques of manpower management. (F,S,SS)

MAN 3503 Managerial Decision Making (DS) (3). This course concentrates on practical decision problems for the manager in an organization. Topics include decision-making theory, linear programming and extensions, Markov Chains, queuing, simulation, and decision support systems. Use of computer packages. Prerequisites: College Algebra, STA 2023 or the equivalent, and QMB 3150. (F,S,SS)

MAN 3602 International Business (MA) (3). Introductory analysis of the business system and management decision-making in the international operation of enterprise. Special emphasis given to international trade and investment; foreign exchange; financial markets; political and cultural interactions between host societies and multinational enterprise. Prerequisite: ECO 3431. (F,S,SS)

MAN 3701 Business in Society (ME) (3). This course provides students with the analytical and practical foundations to (a) Manage business/stakeholder relationships, and (b) Contribute to their communities as responsible business professionals. Topics covered include: personal values and ethics; the sociocultural context of economic activity; business ethics in a global economy; corporate social responsiveness; creating ethical work climates; regulation and public policy; employer/employee relationships; consumer protection and product safety; ecological accountability; ethical issues of new technologies; business-community citizenship; and institutionalizing the social dimensions of managerial decision-making for enhanced economic competitiveness. Coursework includes case analysis, class discussion, service learning, and written assignments. (F,S,SS)

MAN 3949 Cooperative Education Management I (MA) (3). A special program enabling management majors to work in jobs significantly related to their major area and career goals. Specific placement must be approved by the Department Chairperson and faculty advisor prior to enrollment. Prerequisite: qualification for Cooperative Education Program. (F,S,SS)

MAN 4064 Dilemmas of Responsibility in Business Management (MA) (3). The use of interdisciplinary concepts and tools to define and understand the moral and ethical dilemmas involved in business and corporate spheres of activity. Specifically attended to are issues such as pollution, consumer affairs, and quality of public facilities.

MAN 4065 Business Ethics (ME) (3). The application of ethical theory to business management. A review of ethical systems, and examples, theoretical and practical of institutionalizing ethics in organizations. Case analyses used, and written projects required. Prerequisites: MAN 3701 or permission of the instructor. (S)

MAN 4102 Women and Men in Management (MA) (3). Examines the beliefs, values and behaviors of working women and men with whom they interact; gender differences in socialization, expectations, stress, stereotyping, power, balancing of work and private life. (F,S,SS)

MAN 4120 Intergroup Relations in Organization (MA) (3). A study of the psychological and sociological dimensions of intergroup relations. Attention to the problems experienced by subgroups in large and small organizations, with particular reference to ethnic, racial, and sub-cultural groups. The roles and responsibilities of management in the constructive resolution and utilization of inter-group conflict in organizations. (F,S,SS)

MAN 4142 Intuition in Management (MA) (3). Balancing Rational and Intuitive approaches for a flexible decision style. Experiential learning individually and in groups. Application of class learnings to life situations. (F,S)

MAN 4151 Organizational Behavior (MA) (3). An analysis of selected concepts in behavioral science, their interaction and application to management. Topics include perception, motivation, and group behavior. (F,S,SS)

MAN 4201 Organization Theory (MA) (3). A comparative analysis of various theories of organization (including the classical, biological, economic, and Cyert-March models); and of their treatment of fundamental structure; conflict communications; group and individual behavior; and decision-making. Primary emphasis on developing an integrated philosophy of organization and management. Prerequisite: MAN 3025 or equivalent. (F,S)

MAN 4301 Human Resource Management (MA) (3). Attention is focused on the theory and practice of modern personnel management as related to other management functions. Topics include: selection; training; job and performance evaluation; and incentive schemes. Special attention is given to human resource management and development at various organizational levels. (F,S,SS)

MAN 4320 Personnel Recruitment and Selection (MA) (3). In-depth study of the personnel staffing function. Includes an analysis of objectives, techniques, and procedures

for forecasting manpower needs, recruiting candidates, and selecting employees. (F)

MAN 4322 Human Resource Information Systems (MA) (3). A survey of personnel reporting requirements; assessment of information needs; manpower planning; and development of integrated personnel systems. Prerequisites: CGS 3300 and MAN 4301. (F)

MAN 4330 Wage and Salary Administration (MA) (3). Presents the theories and techniques used by management in the areas of work measurement, wage incentives, and job evaluation. (S)

MAN 4401 Collective Bargaining (MA) (3). Introduction to labor/management relationships in the United States. Attention to the development of unionism as an American institution, government regulations, and collective bargaining in private and public sectors. A negotiation simulation generally is integrated with classroom work. (F,S)

MAN 4410 Union-Management Relations (MA) (3). Examination of current issues and problems facing unions and management, with emphasis on unfair labor practices, contract administration, and arbitration. (S)

MAN 4504 Operations Management (DS) (3). Concepts in design, analysis, and control of operating systems. Facility location and layout, work standards, maintenance, quality control, MRP, planning and scheduling applied to production and service systems. Prerequisite: QMB 3150. (F,S,SS)

MAN 4523 Production Information Systems (DS) (3). A study of the special problems associated with the development of information systems capable of supporting the production function of an organization. Review of information systems approaches to inventory control and work processing management. Prerequisites: CGS 3300 and MAN 4504, or consent of instructor. (S)

MAN 4584 Productivity Management (DS) (3). Method and cases to measure, evaluate, plan and improve productivity in business and service organizations. Prerequisite: Senior standing in the College. (F)

MAN 4600 International Management (MA) (3). Introductory survey of management issues that confront the multinational enterprise. At least one class session is devoted to each of the following topics: review of basic trade theory; tariffs and trade barriers; organizational transfer, foreign exchange; institutions affecting the multinational manager (such as IMF, IDB, EX-IM Bank, EC, IBRD), international financial management issues in multinational accounting; personnel management, comparative business customs and behavioral issues; import-export procedures; conflicts with national interests. Prerequisite: MAN 3602. (F,S,SS)

MAN 4610 International and Comparative Industrial Relations (MA) (3). Examines selected industrial relations systems of Western Europe, Asia and the Americas, with special emphasis on differences among systems and the reasons such differences exist. The industrial relations significance of the multinational enterprise and management problems associated with operations in diverse systems are analyzed. (F)

MAN 4613 International Risk Assessment (MA) (3). Introduces the types of risk confronting businesses operating internationally. Critiques specific techniques used to assess risk and relates the results to management decision making. Prerequisite: MAN 3602. (S)

MAN 4618 Managing Global Multimedia enterprises (MA) (3). Multimedia can be used to learn, work, discover, and communicate. Explain how Global entrepreneurial, creative professionals creat and/or use multimedia to accomplish their objectives creatively, cost efficiently, and profitably.

MAN 4629 International Business Internship (MA) (3). Supervised work in a selected organization in the area of international business. Prerequisite: Consent of instructor, department chairperson, MAN 3602, and MAN 4600. (F,S,SS)

MAN 4633 Strategic Management in the MNC (MA) (3). Study of the concept and process of MNC strategy. Involves considering the competitive and political structure of the global market, logic of the multinational enterprise, and nature of organizations. Prerequisite: MAN 3602. (S)

MAN 4660 Business in Latin America (3). This course examines the Latin American business climate and especially U.S.-Latin American Business linkages. Topics include exporting to Latin America, regional economic integration, and examinations of individual countries. Prerequisite: MAN 3602.

MAN 4671 Special Topics in International Business (MA) (3). For groups of students who wish to study intensively a particular topic, or a limited number of topics, in international business, not offered elsewhere in the curriculum. Prerequisites: Approval of the faculty advisor, Chairperson, and Dean. (F)

MAN 4690 Independent Study in International Business (MA) (3). Individual conferences; supervised readings; reports on personal investigations. Prerequisites: Assignment of faculty tutor and written permission of Chairperson and Dean. (F,S,SS)

MAN 4711 Corporate Social Monitoring (ME) (3). The sources of the conception of corporate social responsibility. An examination of the classical doctrines as well as new approaches to the conception of the corporation as a citizen. A portion of the course will be devoted to a discussion of social accountability and social accounting as a specific problem in corporate input. Prerequisite: MAN 3701 or consent of Instructor.

MAN 4722 Strategic Management (MA) (3). The use of cases, guest lecturers, and gaming to integrate analysis and measurement tools, functional areas, and public policy issues. The objective is to develop skill in broad areas of rational decision-making in an administrative context of uncertainty. Prerequisite: Completion of all core requirements. Must be taken in last academic semester of senior year. (F,S,SS)

MAN 4731 Modern Business History (ME) (3). An examination of the history of the corporation in the United States since the Civil War, up to, and including, the development of the multinational corporation. An examination of the social and economic forces operative in the development of the corporate form. A full exploration of the current power of the corporate form and legal and other, efforts to limit this power. Prerequisite: MAN 3701 or consent of the Instructor.

MAN 4741 Business Environment and Policy Formation (ME) (3). A course studying the conceptual and environmental forces which establish the framework of business strategy and tactical decision. A critical analysis of conceptual processes which can limit the executive's capacity to respond to change in the total and in the business environment. Prerequisite: MAN 3701 or consent of Instructor.

MAN 4742 Business and the Physical Environment (ME) (3). A course on the effect of industrialization and technological change on the physical environment. An examination of the current legal, economic and political consequences of pollution and environmental damage, and the abatement of these factors. Prerequisite: MAN 3701 or consent of Instructor.

MAN 4802 Small Business Management (MA) (3). The organization and operation of the small business: accounting, finance, production, and marketing subsystems. The use of analytical approach. Problems of manpower management and information flow. Possible use of EDP, case studies. (F,S)

MAN 4930 Special Topics in Management (MA) (1-6). For students who wish an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty supervisor, Department Chairperson, and Dean required. Grading option. (F,S,SS)

MAN 4949 Cooperative Education-Management II (MA) (1-3). Continuation of MAN 3949. Prerequisites: MAN 3949 and qualification for Cooperative Education Program. (F,S,SS)

MAR 3023 Marketing Management (ME) (3). A descriptive study emphasizing the functions and institutions common to marketing systems. Prerequisite: Junior standing or permission of department. (F,S,SS)

MAR 4025 Marketing of Small Business Enterprises (ME) (3). Designed to develop an understanding of the principles and practices which contribute to the successful marketing operation of a small business enterprise, this course deals with marketing policies, techniques, and applications to aid the entrepreneur in this field. Prerequisite: MAR 3023.

MAR 4071 Current Issues in Marketing I (ME) (3). Intensive study of various topic areas in marketing. Course emphasizes student reading and research, with oral and written reports. Students electing to take this seminar may take no more than 3 credit hours of independent study in marketing. Prerequisite: MAR 3023.

MAR 4072 Current Issues in Marketing II (ME) (3). Students electing to take this seminar may not take independent study in marketing. Prerequisite: MAR 4071.

MAR 4144 Export Marketing (ME) (3). The course emphasizes practical approaches to export marketing, including marketing strategies by individual firms to serve foreign markets. Operational methods of identifying, establishing, and consolidating export markets are discussed, with particular attention to the needs of the smaller business. Prerequisite: MAR 3023. (F,S,SS)

MAR 4156 International Marketing (ME, MA) (3). The course studies the information required by marketing managers to assist in satisfying the needs of consumers internationally. Special emphasis will be given to the constraints of the international environment. Prerequisite: MAR 3023. (F,S,SS)

MAR 4203 Marketing Channels (ME) (3). The course focuses upon institutions, functions, and flows within channels of distribution; and their integration into channels systems. Wholesaling and physical activity are emphasized. Prerequisite: MAR 3023.

MAR 4231 Retailing Management (ME) (3). An examination of the role of retailing in the marketing system. Attention is concentrated on fundamentals for successful retail management. The course emphasizes basic marketing principles and procedures, including merchandising; markup-markdown; pricing; stock-turn; and sales and stock planning. Prerequisite: MAR 3023. (F or S)

MAR 4232 Cases in Retailing Management (ME) (3). This course treats the retail marketing concentration in terms of up-to-date merchandise management methods. Emphasis is on elements of profit, open-to-buy planning, return on investment, and inventory control. The course delineates the decisions made by retailing managements and reviews their available strategies. Prerequisites: MAR 4153, MAR 4613 or consent of department chairperson.

MAR 4323 Advertising Management (ME) (3). The study of advertising in business and society, providing a broad understanding of advertising's social, communicative, and economic purposes. An examination of the types and functions of advertising. Discussion of research, media selection, budget determination, and other elements in the total advertising process. Prerequisite: MAR 4503 or permission of the instructor. (F,S)

MAR 4333 Promotional Strategy (ME) (3). The course deals with problems of decision-making in the areas of marketing communication methods, with primary emphasis on advertising. Prerequisite: MAR 3023.

MAR 4334 Advertising Campaign Management (ME) (3). Strategic approaches to managing advertising campaigns, including selection of approaches; market research; consumer target markets; media; advertisements; development and control of budgets. Prerequisite: MAR 4323 or consent of Instructor. (S)

MAR 4400 Personal Selling (ME) (3). The development of effective salesmen/customer relationships is emphasized. Selection, training, and motivation of the sales force, and the relationship between personal selling and the other elements of marketing strategy are analyzed. Prerequisite: MAR 3023. (F,S)

MAR 4403 Sales Management (ME) (3). Analysis of field sales management with emphasis on the role of personal selling in the marketing mix, building an effective organization, and controlling and evaluating the sales force. Prerequisite: MAR 3023. (S)

MAR 4503 Consumer Behavior (ME) (3). The course offers an introduction to the analysis of the consumer, as the basis for the development of the marketing mix. Prerequisite: MAR 3023. (F,S,SS)

MAR 4613 Marketing Research (ME) (3). An examination of the marketing research process and its role in aiding decision-making. Emphasis is placed on evaluation and utilization of research information in making marketing decisions. Prerequisites: MAR 3023, QMB 3150 or permission of the instructor. (F,S,SS)

MAR 4803 Cases in Marketing Management (ME) (3). An analytic approach to the performance to marketing management. The elements of marketing mix as the focus of decision-making in marketing are studied, and the case method of instruction is employed. Prerequisite: MAR 4503, MAR 4613 or permission of Department Chairman. (F,S,SS)

MAR 4853 Marketing Strategy (ME) (3). Analysis of marketing planning strategy including: strategic marketing; situation analysis, target strategy, positioning strategy, and the strategic marketing plan. Course will utilize a computer simulation. Prerequisites: MAR 4503, and MAR 4613, and permission of the instructor.

MAR 4907 Independent Study in Marketing (ME) (1-6). Individual conferences; supervised reading; reports on personal investigations. Consent of faculty tutor, Department Chairperson and Dean required. (F,S,SS)

MAR 4933 Special Topics in Marketing (ME) (1-6). For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

MAR 4941 Marketing Internship (ME) (1-6). Full-time supervised work in a selected organization. Prerequsites: At least 12 hours in marketing; consent of instructor and Department Chairperson. (F,S,SS)

MAR 4949 Cooperative Education in Marketing (ME) (3). Open to marketing majors who have been admitted to the Cooperative Education Program, with consent of Chairperson. Full-time supervised work with a participating organization in marketing. Report to the organization and a paper to the Chairperson are required. (F,S,SS)

QMB 3003 Quantitative Foundations of Business Administration (DS) (3). Elements and extensive applications of the following quantitative tools to Accounting, Finance, Economics, Marketing, Management and Production: Algebra review, sets, combinatorics, matrices, linear and nonlinear functions, derivatives and integrals with a view towards optimization. Case studies. Open only to Business Administration majors. Prerequisite: College Algebra. (S)

QMB 3200 Application of Quantitative Methods in Business (DS) (3). Inference and modeling for business decisions under uncertainty. Topics covered include survey sampling, confidence intervals and hypothesis testing for mean(s), variance(s), and proportion(s), chi-square test for independence and goodness of fit, correlation, linear regression, time series, and analysis of variance. Use of computer packages to solve real business problems. Prerequisites: College Algebra, STA 3132 equivalent, CGS 3300 or ACG 4401 or equivalent. (F,S,SS)

QMB 4680 Simulation of Management Systems (DS) (3). Exploration of basic concepts in computer simulation of systems. Application of these concepts to a variety of managerial problems. Discussion of waiting line models, continuous simulation models; heuristic methods; and management games. Presentation of several computer programs and languages for simulation. Exposure to the operation and analysis of some simulation models. Prerequisites: CGS 3300. (S)

QMB 4700 Principles of Operations Research I (DS) (3). Application of deterministic operations research models (such as linear and non-linear programming, networks, dynamic programming, and branch and bound techniques) to managerial problems of allocation, planning, and scheduling. (F)

QMB 4905 Independent Study in Decision Sciences (DS) (1-6). Individual conferences; supervised readings; reports on personal investigations. Consent of instructor, Department Chairperson and Dean required. P/F only. (F,S,SS)

QMB 4930 Special Topics in Decision Sciences (DS) (1-6). For students who wish an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of instructor and Department Chairperson required. Grading option. (F,S,SS)

REE 4043 Real Estate Analysis (FI) (3). Decision making processes for development, financing, marketing, and management of real estate within the framework of our governmental, economic, legal, and social systems; does not meet course content requirements of Florida real estate Commission for obtaining a real estate license. (F)

REE 4103 Appraisal of Real Estate (FI) (3). Valuation and appraisal framework applied to residential and income producing property; role of computers; valuation theory and process as a guide to business decisions. (F)

REE 4204 Real Estate Financial Analysis (FI) (3). Financial analysis and structuring of real estate projects; traditional and creative concepts and mechanisms for construction and permanent financing; portfolio problems; governmental programs; money and mortgage market analysis; computers and financial models. Prerequisites: REE 4043 and FIN 3403, or Permission of the instructor. (S)

REE 4303 Real Estate Investment (FI) (3). Advanced concepts of acquisition, ownership, and disposition of investment property; taxation and tax shelter; cash flow projection; analysis of specific types of investment property; utilization of computers as a decision-making tool; models of real estate investment analysis; case analysis and policy formulation. (S)

REE 4504 Real Estate Management (FI) (3). Theories and techniques of professional management of real estate including such topics as creating a management plan; merchandising space; economics of alternates; market analysis; the maintenance process; owner-tenant manager relations; operating budgets; tax consideration; and ethics. (on demand)

REE 4733 Real Estate Land Planning (FI) (3). Theories of city growth and structure, operations of the real estate market in land allocation; current practices in real estate land planning. (on demand)

REE 4754 Real Estate and Regional Development Policy (FI) (3). A capstone course in integrating all the aspects of real estate and regional development learned in previous courses, projects, cases, and field trips. Prerequisite: Permission of the instructor. (on demand)

REE 4814 Real Estate Marketing (FI) (3). Techniques of selecting, training, and compensating sales personnel; obtaining and controlling listings; process and methods involved in the selling of real estate; promotion activities; including advertising and public relations; growth problems; professionalism; and ethics. (on demand)

REE 4905 Independent Study in Real Estate (FI) (1-6). Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor, Department Chairperson, and Dean required. (F,S)

REE 4930 Special Topics in Real Estate (FI) (1-6). For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty tutor and Department Chairperson required. (F,S)

SPC 4446 Corporate Communication Theory and Leadership Dynamics (TD) (3). Emphasis on oral communication and leadership skills that are essential for the business community.

STA 2023 Statistics for Business and Economics (MS) (3). The use of statistical tools in management; introduction of probability, descriptive statistics, and statistical inference as included. (F,S,SS)

TAX 4001 Income Tax Accounting (AC) (3). A survey of federal income taxation with emphasis on taxation of individuals and corporations, and the ethics of income tax accounting Prerequisite: ACG 4111 with grade of 'C' or higher. (F,S,SS)

TAX 4901 Independent Study in Taxation (AC) (1-3). Individual conferences, supervised readings, and reports on personal investigations. Prerequisite: Permission of the Director of the School of Accounting.

TAX 4931 Special Topics in Taxation (AC) (1-3). For groups of students wishing an intensive study of a particular topic(s) not otherwise offered in the curriculum. Prerequisite: Permission of the Director of the School of Accounting.

TRA 4012 Principles of Transportation (ME) (3). Overview of transportation systems. Topics include: a survey of transportation modes (including rail, motor, water, air, and pipelines), management issues (market entry, pricing, competitive responses, service levels, capital structure, traffic management) and global perspectives.

TRA 4202 Logistics Technology (ME) (3). The use of information technology in logistics: EDI, data bases, Internet, decision support systems for logistics, and commercial logistics software. The application of quantitative models in logistics.

TRA 4203 Principles of Logistics (ME) (3). Overview of the logistics function within a firm and in the context of integrated vertical systems. Topics include: customer service, information flow, inventory control, materials management, order processing, packaging, physical distribution, purchasing, transportation, warehousing, and supply chain management.

TRA 4214 Logistics Strategy (ME) (3). Study of logistics policy and strategy, computer simulation of logistics systems under various market conditions, and integration of the logistics function with marketing, production, and finance functions. Case and simulation exercises to illustrate logistics.

TRA 4411 Airport Management (ME) (3). Application of management principles to airport operation, with emphasis on unique characteristics of airport finance; government relations and regulations; airline relations and interdependence.

TRA 4721 Global Logistics (ME) (3). Logistics activities of multinational firms, international transportation systems, global sourcing, customer service, faculty location, inventory management, customs issues, export-import activities and the role of governments.

TRA 4936 Special Topics in Transportation (ME) (1-6). For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

College of Business Administration

Dean **Joyce Elam**
Associate Dean, Finance and Administration **Donald W. Fair**
Associate Dean, Undergraduate and Professional Programs **Dana L. Farrow**
Associate Dean, North Campus **Karen Paul**
Assistant Dean, Counseling **Lynda Raheem**
Assistant Dean, Marketing Communication and Publications **Sally M. Gallion**
Director, School of Accounting **James H. Scheiner**

Department Chairs:
Decision Sciences and Information Systems **Christos Koulamas**
Finance **Krishnan Dandapani**
Management and International Business **Karl O. Magnusen**
Marketing and Business Environment **J.A.F. Nicholls**

Faculty

Alonso, Kevin, B.S.E.E. *(Florida International University), Coordinator, Energy Conservation Training and Assistance Program, Small Business Development Center*

Anderson, Gary, Ph.D. *(University of Illinois), Associate Professor, Finance*

Auster, Rolf, Ph.D. *(Northwestern University), CPA, CMA, Professor, Accounting*

Barber, Joel, Ph.D. *(University of Arizona), Associate Professor, Finance.*

Baldwin, Amelia, Ph.D. *(Virginia Polytechnic Institute), Associate Professor, Accounting*

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de Boyrie, Maria, Ph.D. *(Florida International University), Assistant Professor, Finance*

Dessler, Gary, Ph.D. *(City University of New York), Professor*

Dieguez, Manuel, M.S.M. *(Florida International University), CPA, Instructor, Accounting*

Dittenhofer, Mortimer, Ph.D. *(American University), Professor, Accounting*

Dolich, Ira, Ph.D. *(University of Texas), Lecturer, Marketing and Business Environment*

Dorsett, Herman W., Ed.D. *(Columbia University), Associate Professor, Management and International Business*

Elam, Joyce, J., PH.D. *(University of Texas, Austin), Professor, Decision Sciences and Information Systems, James L. Knight Eminent Scholar, and Dean*

Fair, Donald W., M.Acc. *(Bowling Green State University), CPA, Instructor, Accounting, and Associate Dean*

Farrow, Dana, Ph.D. *(University of Rochester), Professor, Management and International Business, and Associate Dean*

Friday, Earnest, Ph.D. *(University of Miami), Assistant Professor, Management and International Business*

Gallion, Sally M., Ph.D. *(University of Missouri), Assistant Dean, Marketing and Business Environment*

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Gayle, Dennis J., Ph.D. *(UCLA), Associate Professor, Marketing and Business Environment*

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Greenberg, Barnett A., DBA *(University of Colorado), Professor, Marketing and Business Environment*

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Hallbauer, Rosalie C., Ph.D. *(University of Florida), CPA, CMA, Associate Professor, Accounting*

Hamid, Shahid, Ph.D. *(University of Maryland), Associate Professor, Finance*

Harris, Judy, Ph.D. *(University of Houston), Assistant Professor, Marketing and Business Environment*

Hendrickson, Harvey S., Ph.D. *(University of Minnesota), CPA, Professor, Accounting*

Hodgetts, Richard M., Ph.D. *(University of Oklahoma), Professor, Management and International Business*

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Jarrett, Royland D., M.B.A. *(American University), Regional Manager, Small Business Development Center*

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King, Joseph T., M.B.A. *(Barry University), Lecturer, Decision Sciences and Information Systems*

Koulamas, Christos P., Ph.D. *(Texas Tech University), Professor and Chair, Decision Sciences and Information Systems*

Kranendonk, Carl J., M.B.A. *(University of Tulsa), Instructor, Marketing and Business Environment*

Kroeck, K. Galen, Ph.D. *(University of Akron), Professor, Management and International Business*

Kyparisis, George J., D.Sc. *(George Washington University), Professor, Decision Sciences and Information Systems*

Lassar, Walfried, Ph.D. *(University of Southern California), Associate Professor, Marketing and Business Environment*

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Lubell, Myron, D.B.A. *(University of Maryland), CPA, Associate Professor, Accounting*

Luytjes, Jan B., Ph.D. *(University of Pennsylvania), Professor, Management and International Business*

Luytjes, Martin C., M.B.A. *(Florida International University), Lecturer, Management and International Business*

Magnusen, Karl O., Ph.D. *(University of Wisconsin), Professor and Chair, Management and International Business*

Maidique, Modesto A., Ph.D. *(Massachusetts Institute of Technology), Professor, Management and International Business, and University President*

Mandakovic, Tomislav, Ph.D. *(University of Pittsburgh), Professor, Decision Sciences and Information Systems*

Manry, David, Ph.D. *(University of Texas at Austin), Assistant Professor, Accounting*

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McCrink, Carmen, Ph.D. *(University of Miami), Assistant Director, Center for Management Develop-Ment & Executive Education)*

Miniard, Paul, Ph.D. *(University of Florida), BMI Professor of Marketing , Marketing and Business Environment*

Moncarz, Raul, Ph.D. *(Florida State University), Professor, Finance*

Moss, Sherry, Ph.D. *(Florida State University), Associate Professor, Management and International Business and Associate Director, Executive Master of Business Administration Program*

Most, Kenneth S., Ph.D. *(University of Florida), CPA, F.C.A., Professor, Emeritus, Accounting*

Mueller, Stephen L., Ph.D. *(University of Texas at Dallas), Assistant Professor, Management and International Business*

Murphy, Kenneth E., Ph.D. *(Carnegie Mellon University), Assistant Professor, Decision Sciences and Information Systems*

Nesbit, Marvin D., M.B.A. *(University of West Florida), Director, Small Business Development Center*

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Parhizgari, Ali, M. Ph.D. *(University of Maryland), Professor, Finance and Director, MBA Program*

Paul, Karen, Ph.D. *(Emory University), Professor, Marketing and Business Environment and Associate Dean*

Polster, Eleanor, M.B.A. *(Florida International University), Instructor, Management and International Business and Graduate Coordinator*

Pomeranz, Felix, Ph.D. *(University of Birmingham, England), CPA, CSP, CFE, Professor and Associate Director, Accounting, and Director, Center for Accounting, Auditing, and Tax Studies*

Prakash, Arun, Ph.D. *(University of Oregon), Professor, Finance*

Racca, Kristie, B.S. *(Florida International University), Counselor and Advisor*

Raheem, Lynda, M.B.A. *(University of Miami), Instructor, Marketing and Business Environment, and Assistant Dean*

Remmer, Louis F., M.I.B. *(Florida International University), Instructor, Marketing and Business Environment*

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Rodriguez, Leonardo, D.B.A. *(Florida State University), Professor, Accounting, and Management and International Business*

Roomes, Donald, M.B.A. *(Florida International University), Instructor, Management and International Business and Director, Weekend BBA*

Root, H. Paul, Ph.D. *(Purdue University), James K. Batten Eminent Scholar and Lecturer and Director, Knight Ridder Center for Excellence in Management, Marketing and Business Environment*

Rose-Green, Ena, Ph.D. *(Florida State University), CPA, Assistant Professor, Accounting*

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Shepherd, Philip, Ph.D. *(Vanderbilt University), Associate Professor, Marketing and Business Environment*

Silverblatt, Ronnie, Ph.D. *(Georgia State University), Associate Professor, Management and International Business*

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Wrieden, John A., J.D. *(George Mason University), Lecturer, Accounting*

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Yeaman, Doria, J.D. *(University of Tennessee), Associate Professor, Accounting*

Zanakis, Steve H., Ph.D. *(Pennsylvania State University), Professor , Decision Sciences and Information Systems*

Zdanowicz, John S., Ph.D. *(Michigan State University), Professor and Director, Center for Banking and Financial Institutions and Director, Jerome Bain Real Estate Institute*

Zegan, Peter J., M.S. *(University of Florida), Instructor, Decision Sciences and Information Systems*

College of Education

College of Education

The mission of the College of Education is to prepare teachers, educational administrators, and other education-related professionals to work in diverse settings. Our graduates possess the knowledge, skills and dispositions needed to improve the human condition through their work within the classroom and in related settings.

The theme (orienting principle) of the College is to ***prepare graduates to facilitate learning and change within diverse populations and environments.*** Graduates are expected to view teaching as facilitating student growth, rather than simply imparting information. They are also expected to be knowledgeable about students' individual backgrounds, preferences, interests, and learning styles. In addition, graduates are expected to use this knowledge to help learners and clients reach their full potential.

The educational aim of the College, which is derived from its mission and theme, ***is to facilitate education and growth through individual empowerment, interconnectedness, and change.*** This aim establishes a basis for subsequent decisions about *what* to teach (general and professional education courses and content studies) and *how* to teach (professional education's knowledge base).

The College offers instructional programs at the undergraduate and graduate levels, engages in research and program development activities, and provides field services to the educational community.

The College, housed in the Sanford and Delores Ziff Education Building (ZEB) at Florida International University—University Park, is fully accredited by the National Council for the Accreditation of Teacher Education, the Florida Department of Education, and the Florida Board of Regents.

To support its mission, the College is organized into six departments:

- Educational Foundations and Professional Studies
- Educational Leadership, and Policy Studies
- Educational Psychology and Special Education
- Elementary Education
- Health, Physical Education and Recreation
- Subject Specializations

Bachelor of Science degree programs are offered in the following specialities:

Art Education
Biology Education
Chemistry Education
Early Childhood Education (with ESOL endorsement)
Elementary Education
Emotional Disturbance
  Varying Exceptionalities Track
English Education
Health Education
  Exercise Physiology Track
Health Occupations Education
Home Economics Education
Mathematics Education
Mental Retardation
  Varying Exceptionalities Track
Modern Language Education
  French
  Spanish
Music Education
Parks and Recreation Management
  Leisure Service Management
  Parks Management
  Recreational Therapy
Physical Education
  Physical Education: Grades K-8
  Physical Education: Grades 6-12
  Sports Management
Physics Education
Specific Learning Disabilities
  Varying Exceptionalities Track
Social Studies Education
Vocational Industrial Education
  Organizational Training Track

Applicants to the College of Education programs should carefully examine the choices of major concentrations and program objectives. Because there are occasional revisions of College of Education curriculum during the academic year, some curriculum changes may not be reflected in the current catalog. Prospective students are advised to contact appropriate advisors to ask for current information regarding specific programs of interest.

General advisement is available by telephone: (305) 348-2768 for University Park, (305) 919-5820 for North Campus. Broward residents may call (954) 355-5622 for North Campus or for the Broward Program. Additional information is available on the FIU website at www.fiu.edu Specific program advisement is available by prearranged personal appointment with advisors at all locations.

Note: The programs, policies, requirements, and regulations listed in this catalog are continually subject to review in order to serve the needs of the University's various publics and to respond to the mandates of the Florida Board of Regents and the Florida Legislature. Changes may be made without advanced notice. Please refer to the General Information section for the University's policies, requirements, and regulations.

Bachelor of Science Programs

Undergraduate students will complete at least 60 semester hours of upper-division credits, including a residency requirement of 30 semester hours prior to graduation at the University. Before formal admission to the University, a student may be approved to take 15 credits as a non-degree seeking student which, if applicable to the major field of study and approved by an advisor, may be applied to the degree program.

Undergraduate Admission Requirements

College of Education program standards are intended to insure that students have breadth and depth of background needed for successful upper-division work in education. Students are required to have a minimum overall GPA of 2.5 for all lower division/transfer course work to be admitted to the College. In addition, students are required to successfully complete all four subsections (without alternatives) of the CLAST prior to transferring to the College.

Students transferring from out-of-state or private institutions, who have not met the CLAST requirement, will be allowed one semester in which to successfully pass all four sub-sections.

Applicants to the College must submit an Application for Admission to the University and must follow the regular University procedures. Applicants must be eligible for admission to the University before being considered for admission to the College.

Test Requirements: All teacher education candidates entering at the junior level must present a minimum score at the fortieth percentile on one of the following: 840 on the SAT taken prior to April 1, 1995 and 950 after April 1, 1995 or 19 on the ACT prior to October 1989 or 20 on the EACT and satisfactory CLAST scores.

Lower Division Prerequisites

All freshman and sophomore prerequisites for admission into an academic program must be satisfied with a minimum grade of 'C' and a minimum overall GPA of 2.5 before admission is completed.

Students must satisfy either the Lower Division Core requirements or the General Education requirements. In addition, students admitted to the lower division Fall 1996 or later or admitted to upper division Fall 1998 or after must complete the following College of Education prerequisites:

EDF 1005	Introduction to Education[1]
EDG 2701	Teaching Diverse Populations[1]
EME 2040	Introduction to Educational Technology (or acceptable substitute)

[1]Requires field experience of a minimum of 15 clock hours per semester in addition to class time.

In addition to EDG 2701, students must take six additional hours with an international or diversity focus. Refer to the Core Curriculum/General Education Requirements section of the Undergraduate Catalog for a listing of courses which have an international and/or diversity focus. Other courses taken at the Community College may also qualify for this prerequisite.

At least one course taken to meet the natural science requirements in General Education and/or program prerequisites must include a laboratory component. Contact your program advisor. See individual program listings for specific prerequisites.

Professional Studies Core (14)

Every teacher education student must enroll in the following courses:

EDF 3515	Philosophical and Historical Foundations of Education	3
EDF 4634	Cultural and Social Foundations of Education	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
EDP 3004	Educational Psychology	3

Subsequent special teaching laboratories and courses build on these core courses to extend and refine knowledge and skill. All teacher education programs include one semester of student teaching in a public or approved non-public school. Student teaching requires the student to spend the entire school day of a complete semester on site. A student is not allowed to be employed while student teaching.

Upon the successful completion of all program requirements, the Bachelor of Science degree is awarded. The student is eligible to apply for a State of Florida Teaching Certificate in the field of specialization if the student has completed a College of Education State-approved program with a required 2.5 GPA. Other requirements for regular certification include submitting to the Florida Department of Education evidence of satisfactory CLAST scores and passing both the professional education and subject area subtests administered by the Florida Department of Education.

Undergraduate Grading Policies

Undergraduate students must have a minimum overall grade point average (GPA) of 2.5 in order to graduate. A grade of 'C-' or less is not acceptable toward graduation in any required program of study course in the College of Education, any college/program prerequisite or any Gordon writing/math requirements meeting General Education or lower division core requirements. Furthermore, a student will not be approved for student teaching with a grade of 'C-' in any required program of study course or with less than a minimum GPA of 2.5 in their field of specialization. Specific undergraduate programs may have higher grading criteria than these minima. Students applying for State of Florida Teacher Certification must present a GPA of 2.5 or higher in their teaching major.

All stated admission requirements are to be considered minima. A student who meets these minimum requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that he/she understands and has met the requirements.

Certification Only Students

Students choosing to pursue course work leading toward State of Florida Teacher Certification (rather than a second degree) are considered Non-Degree Seeking Students and must abide by all policies and limitations set forth for non-degree seeking students. Students should seek admission to degree programs at the undergraduate or masters level to facilitate enrollment in program courses. State of Florida certification requirements are considered to be minimum requirements. It may be necessary to register for additional prerequisite courses to enroll in a desired course. Students who register for a course but have not completed the prerequisite course(s) will be administratively dropped from the class.

Alternate Masters Degree Programs

Students who hold a bachelors degree in a field other than education and wish to teach may want to consider pursuing an Alternate Masters Degree Program, a degree program that leads to State of Florida teacher certification plus a master's degree.

Fingerprint Requirement

State of Florida Teacher Certification, in addition to other criteria, requires all applicants to be fingerprinted and checked by the FBI. Some school districts also require a fingerprint check and drug testing for student interns and/or student teachers. Students with a history of felony arrests may wish to consider this carefully and seek advice from an advisor before applying to programs in the College.

Educational Foundations and Professional Studies

Robert V. Farrell, *Associate Professor and Chairperson, Educational Foundations, International Development Education*
Carlos M. Alvarez, *Associate Professor, International Development Education, Educational Psychology*
John A. Carpenter, *Professor, Educational Foundations, International and Intercultural Development Education, and Higher Education*
Erskine S. Dottin, *Professor, Educational Foundations, Politics of Education*
Miguel Angel A. Escotet, *Professor, International and Intercultural Development Education and Research*
Rosa Castro Feinberg, *Associate Professor, Educational Foundations, Bilingual Education/TESOL*
Delia Garcia, *Assistant Professor, Educational Foundations, Urban Education and TESOL*
I. Ira Goldenberg, *Professor Educational Foundations and Urban Education*
Deborah Hasson, *Instructor, Educational Foundations, Urban Education, and TESOL*
Patricia A. Killian, *Assistant Professor, Teaching English as a Second Language*
Jodi Reiss, *Instructor, Teaching English as a Second Language*
Colleen A. Ryan, *Associate Professor, Educational Psychology, Educational Foundations*
S.L. Woods, *Associate Professor, Educational Foundations, Urban Education*

The Department of Educational Foundations and Professional Studies has three graduate programs that are discussed in the Graduate Catalog. In terms of undergraduate education, this Department coordinates the professional education, educational foundations courses, and core courses which are part of the common preparation of undergraduate teacher education majors at FIU.

The Professional Studies undergraduate core includes the following courses:

EDF 1005	Introduction to Education	3
EDF 3515	Philosophical and Historical Foundations of Education	3
EDF 4634	Cultural and Social Foundations of Education (see prerequisite)	3
EDG 2701	Teaching Diverse Populations	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
EME 2040	Introduction to Educational Technology	3

In terms of the mission of the College, the Department is responsible for incorporation of educational foundations, multicultural, and/or general methodology studies into professional education programs. The Department is the primary source of the professional studies component.

META Consent Decree Requirements

The ESOL endorsement is required of state certified teachers who teach reading, language arts or English proficient (LEP) students. The ESOL Endorsement may be added on to the following areas of certification: Early Childhood Education, Elementary Education, English Education, Special Education, and Foreign Language Certification. Until such time that the competencies are infused into each undergraduate degree program, students will be required to complette the five courses as part of, or in addition to, program requirements. The ESOL Endorsement consists of the following five courses:

TSL 5371	Special Methods of TESOL	3
TSL 5142	Curriculum Development in ESOL	3
TSL 5938	Principles of ESOL Testing	3
TSL 5245	Developing ESOL Language and Literacy (Applied Lingusitics Component)	3
EDG 5707	Cultural and Cross-Cultural Studies	3

Educational Psychology and Special Education

Patricia Barbetta, *Chairperson and Associate Professor, Emotionally Handicapped*
Michael P. Brady, *Professor, Special Education*
Wendy Cheyney, *Associate Professor and Associate Dean. Learning Disabilities*
Judith Cohen, *Special Education Field Placement Coordinator*
Patricia del Valle, *Assistant Professor School Psychology, Educational Psychology*
Marisal Gavilan, *Associate Professor, Educational Psychology/Bilingual Education*
Maureen Kenny, *Assistant Professor, Mental Health Counseling*
Philip J. Lazarus, *Associate Professor, School Psychology, Educational Psychology*
Luretha F. Lucky, *Associate Professor, Mental Retardation*
Adriana McEachern, *Assistant Professor, Counselor Education, Educational Psychology*
Martha Pelaez, *Associate Professor, Educational Psychology, Behavior Analysis*
Howard Rosenberg, *Associate Professor, Mental Retardation*
Smita Shukla, *Assistant Professor, Special Education*
Stephen S. Strichart, *Professor, Learning Disabilities*
Jethro W. Toomer, *Professor, Community Mental Health Counseling*

General Information

The Department of Educational Psychology and Special Education offers a variety of programs to prepare teachers of students who have emotional disturbance, learning disabilities, mental retardation and those who are gifted. All programs require substantial supervised fieldwork. State of Florida certification requirements are met for all programs preparing school personnel.

All stated admission requirements are to be considered minima. A student who meets these minimum requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that he/she has met the requirements.

The Department offers the following undergraduate and certificate programs:

Bachelor of Science

Degree Program Hours: 120

Emotional Disturbance
Mental Retardation
Specific Learning Disabilities
and an add-on track in Varying Exceptionalities

Certification/Endorsements
Gifted Education

Professional Certificate Programs
Emotional Disturbance
Mentally Handicapped
Specific Learning Disability

Bachelor of Science in Special Education

The undergraduate special education program specializations utilize a field-centered training model leading to approval for State of Florida Certification in Specific Learning Disabilities, Emotional Disturbance, Mental Retardation and a track in Varying Exceptionalities.

The special education program recognizes that students with disabilities are entitled to a free and appropriate public education, that all students are to be educated in the least restrictive yet most enabling environment and are to be mainstreamed to the greatest extent possible. Special educators also provide services to preschool children and adults.

Given this context, undergraduate special education programs emphasize the development of the following competencies to be demonstrated in both the University and field settings:

1. Identifying and diagnosing students with learning and/or behavior problems.
2. Prescribing and implementing appropriate individual educational plans to meet these problems.
3. Effecting appropriate instruction for children with learning and/or behavior problems.
4. Managing classroom behavior.
5. Planning for inclusion and collaboration with parents and other education personnel.

Diagnostic-prescriptive teaching and management skills are to be demonstrated with students with mild disabilities who range in age from infancy to adulthood, and who represent multicultural, multilingual backgrounds. Special education majors may have field work with students who have mild, moderate, and severe disabilities.

Lower Division Preparation

An Associate in Arts Degree or equivalent preparation in basic general education.

Specific Learning Disabilities, Emotional Disturbances, and Mental Retardation Common Prerequisites

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology	3

[1]Requires field experience of 15 clock hours outside of class time.

Requirements (15)

These 15 hours are required beyond those taken to meet general education requirements and must be from the following liberal arts and sciences areas:

fine arts or humanities
political sciences, sociology, economics, cultural geography, or speech
mathematics
natural sciences and/or
psychology

Among these 15 hours must be included one course in mathematics and, combined with General Education requirements, two courses in the natural sciences. At least one course taken to meet the natural science requirements in general education and/or prerequisites must include a laboratory component.

In addition to EDG 2701, students must take six credit hours with an international or diversity focus in lower division.

To qualify for admission to the program, undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, have earned a minimum overall grade point average of 2.5 and must be otherwise acceptable into the program. All teacher education candidates entering at the junior level must present a minimum score of 840 on the SAT prior to April 1, 1995 or 950 after April 1, 1995 or 960 after October 1, 1998 or 19 on the ACT prior to October 1989 or 20 on the EACT and passing CLAST scores without alternates.

Note: **At press time the courses for the undergraduate special education programs were being organized in instructional phases. Beginning Fall 1999, students will be required to**

complete phases in a prescribed order. Please consult program faculty to design your program of study.

Emotionally Handicapped (60)

EDF 3515	Philosophical and Historical Foundations	3
EDP 3004	Educational Psychology	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Lab	2
EDF 4634	Cultural and Social Foundations of Education	3
EEX 3012	Educational Needs of Students with Exceptionalities	3
EEX 3202	Personal and Social Characteristics of Students with Exceptionalities	3
EEX 3221	Assessment of Students with Exceptionalities	3
SPA 3000	Language Development and Communication Disorders	3
RED 4150	Teaching Primary Reading	3
LAE 4314	Teaching Elementary Language Arts	3
MAE 4310	Teaching Elementary Math	3
EEX 4940	Field Component for Elementary Methods *(2 hours per week)*	0
EEX 4601	Behavioral Approaches to Classroom Learning I	3
EED 4243	Strategies for Teaching Students with Emotional Handicaps[1,2]	3
EED 4244	Curriculum for Teaching Students with Emotional Handicaps[1,2]	3
EED 4212	Behavioral Approaches to Classroom Learning II[1,2]	3
EEX 4810	Supervised Practicum in Special Education[1,2]	1-3
EEX 4861	Student Teaching	9
EEX 4936	Student Teaching Seminar	3

Learning Disabilities (60)

EDF 3515	Philosophical and Historical Foundations	3
EDP 3004	Educational Psychology	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Lab	2
EDF 4634	Cultural and Social Foundations of Education	3
EEX 3012	Educational Needs of Students with Exceptionalities	3
EEX 3202	Personal and Social Characteristics of Students with Exceptionalities	3
EEX 3221	Assessment of Students with Exceptionalities	3
SPA 3000	Language Development and Communication Disorders	3
RED 4150	Teaching Primary Reading	3
LAE 4314	Teaching Elementary Language Arts	3
MAE 4310	Teaching Elementary Math	3
EEX 4940	Field Component for Elementary Methods *(2 hours per week)*	0
EEX 4601	Behavioral Approaches to Classroom Learning I	3
ELD 4240	Strategies for Teaching Students with Learning Disabilities[1,2]	3
ELD 4230	Curriculum for Teaching Students with Learning Disabilities [1,2]	3
EED 4212	Behavioral Approaches to Classroom Learning II[1,2]	3
EEX 4810	Supervised Practicum in Special Education[1,2]	1-3
EEX 4861	Student Teaching	9
EEX 4936	Seminar in Student Teaching	3

Mental Retardation (60)

EDF 3515	Philosophical and Historical Foundations	3
EDP 3004	Educational Psychology	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Lab	2
EDF 4634	Cultural and Social Foundations of Education	3
EEX 3012	Educational Needs for Students with Exceptionalities	3
EEX 3202	Personal and Social Characteristics of Students with Exceptionalities	3
EEX 3221	Assessment of Students with Exceptionalities	3
SPA 3000	Language Development and Communication Disorders	3
RED 4150	Teaching Primary Reading	3
LAE 4314	Teaching Elementary Language Arts	3
MAE 4310	Teaching Elementary Math	3
EEX 4940	Field Component for Elementary Methods (2 hours per week)	0
EEX 4601	Behavioral Approaches to Classroom Learning I	3
EMR 4221	Curriculum for Teaching Students with Mental Retardation[1,2]	3
EMR 4362	Strategies for Teaching Students with Mental Retardation[1,2]	3
EED 4212	Behavioral Approaches to Classroom Learning II[1,2]	3
EEX 4810	Supervised Practicum in Special Education[1,2]	1-3
EEX 4861	Student Teaching	9
EEX 4936	Seminar in Student Teaching	3

Varying Exceptionalities: Add-on

Varying Exceptionalities is a track that can be taken concurrently with one of the majors and requires the two strategies courses not taken as a part of the senior block. This track leads to add-on certification to the degree program of LD, MR, and/or EH.

EED 4243	Strategies for Teaching Students with Emotional Handicaps[1]	3
EEX 4240	Nature and Needs of Students with Mild Disabilities	3
ELD 4240	Strategies for Teaching Students with Learning Disabilities[1]	3
EMR 4362	Strategies for Teaching Students with Mental Retardation[1]	3

[1]Field Work Required.

[2]Senior Block, Fall term only.

Note: Courses within the undergraduate program require field placement during school hours. RED 4150, LAE 4314, MAE 4310 require registration in corequisite EEX 4940. In addition to a full-time student teaching placement during the final semester, students engage in a Senior Block experience the fall semester of their senior year. This experience requires five mornings per week of placement in an educational setting and class attendance at the University. Permission to student teach is contingent upon satisfactory completion of all requirements specified in the program. Applications to student teach must be filed in the office of the Director of Internship and Student Teaching by August 1 preceding the Spring Student Teaching semester. Please confirm this due date with your

advisor. The due date is subject to change.

All stated admission requirements are to be considered minima. A student who meets these minimum requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that he/she has met the requirements.

Elementary Education

Lynne D. Miller, *Associate Professor, Literacy Education and Chairperson, Elementary Education*
Maria A. Bilbao, *Associate Dean, Elementary Education*
Joyce C. Fine, *Associate Professor, Reading and Language Arts Education*
Rebecca P. Harlin, *Associate Professor, Early Childhood/Elementary Education*
Sharon W. Kossack, *Professor, Literacy Education*
Lisbeth Dixon-Krauss, *Assistant Professor, Literacy Education*
Scott P. Lewis, *Assistant Professor, Science and Elementary Education*
Nancy Marshall, *Associate Professor, Reading and Language Arts Education*
Alicia Mendoza, *Associate Professor, Early Childhood/Elementary Education*
George E. O'Brien, *Associate Professor, Science Education*
William M. Ritzi, *Instructor, Art Education*
Craig Williams, *Instructor, Elementary Education*
Nina Zaragoza, *Associate Professor, Reading and Language Arts Education*

General Information

The department offers programs in elementary, early childhood, and reading education. The elementary education and early childhood education programs may be taken at the Bachelor's, Master's, or Doctoral levels. The reading program may be taken at the master's and doctoral level only.

The department is strongly committed to field experiences. The field component of the bachelor's degree in elementary education is realized through Field Experience, which is taken concurrently with courses throughout the program, and through Student Teaching.

The department is also committed to service to the community and the extension of knowledge through research.

Bachelor of Science in Early Childhood Education: (Prekindergarten/Primary Education: Age 3 through Grade 3 & ESOL Endorsement)

Degree Program Hours: 128

Lower Division Preparation

An Associate in Arts Degree or equivalent preparation in basic general education is required. If a student has not completed equivalents of the courses noted below, these courses must be completed with a grade of 'C' or higher prior to enrollment in courses at the University for which there are prerequisites.

To qualify for admission to the program, undergraduates must have met all the lower division requirements including: 60 credit hours of lower-division courses, all general education requirements, lower-division GPA of 2.5 or higher, all four parts of CLAST passed, SAT of 840 prior to April 1, 1995 or 950 after April 1, 1995 or 960 after October 1, 1998 or higher or EACT of 20 or higher.

All stated admission requirements are to be considered minima. A student who meets these minimum requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that he/she has met the requirements.

Lower-Division Common Prerequisites

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3

[1]Requires field experience of 15 clock hours outside of class time.

Additional General Education Requirements (15)

These 15 hours are required beyond those taken to meet General Education requirements and must be from the following liberal arts and sciences areas:

fine arts or humanities
political sciences, sociology, economics, cultural geography, or speech
mathematics

natural sciences and/or psychology

Among these 15 hours must be included one course in mathematics and, combined with General Education requirements, two courses in the natural sciences. At least one course taken to meet the natural science requirements in general education and/or prerequisites must include a laboratory component.

In addition to EDG 2701, students must take six credit hours with an international or diversity focus in lower division.

Upper Division Program: (68)

Upper Division Course Work:[1]

Block I - Philosophical Issues

EDE	Issues in Early Childhood Education	3
EDF 3515	Philo/Historical Foundations	3
SCE 4310	Teaching Elementary Science[3]	3
TSL	Foundations of TESOL	3
EEC 4941	Field Experience[2]	0

Block II - Developmental Issues

ARE 3313	Teaching Elementary Art	3
EDP 3004	Educational Psychology	3
EEC 4005	Early Childhood Programs	3
EEX 3xxx	Exceptional Education Students	3
LAE 3xxx	Language and Literacy Development	3
EEC 4941	Field Experience	0

Block III - Methodological Issues

EDG 3321	General Teaching[4]	3
EDG 3321L	General Teaching Lab[4]	2
HLP 3013	Teaching Elementary Health/PE	3
MAE 4310	Teaching Elementary Math	3
RED 4150	Teaching Primary Literacy	3
EEC 4941	Field Experience	0

Block IV - Social/Cultural Issues

EDF 4634	Cultural/Social Foundations	3
EEC 4204	Integrated Early Childhood Curriculum	3
MUE 3210	Teaching Elementary Music	3
SSE 4xxx	Early Childhood Social Studies	3
TSL	TESOL and Multiculturalism	3
EEC 4941	Field Experience	0

Block V - Student Teaching

EDF 4634	Cultural/Social Foundations of Education	3
EEC 4943	Student Teaching	9

These two courses must be taken as co-requisites. Students must apply for student teaching two semesters before they plan to begin Block V.

[1]All courses in a block must be completed before any courses in the next block can be taken. Students who take fewer than four courses each term must take the courses within each block in the sequence listed.

[2]Part-time students must enroll in EEC 4941 every semester in which an elementary education course is taken.

[3]Programatic Professional Development Experience in Science Education are required in blocks II, III, IV, & V

[4]EDG 3321 and EDG 3321L are corequisites.

Bachelor of Science in Elementary Education (Grades 1-6 & ESOL Endorsement)

Degree Program Hours: 128

Lower Division Preparation

An Associate in Arts Degree or equivalent preparation in basic general education is required. If a student has not completed equivalents of the courses noted below, these courses must be completed with a grade of 'C' or higher prior to enrollment in courses at the University for which there are prerequisites.

To qualify for admission to the program, undergraduates must have met all the lower division requirements including: 60 credit hours of lower-division courses, all general education requirements, lower-division GPA of 2.5 or higher, all four parts of CLAST passed, SAT of 840 prior to April 1, 1995 or 950 after April 1, 1995 or 960 after October 1, 1998 or higher or EACT of 20 or higher.

All stated admission requirements are to be considered minima. A student who meets these minimum requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that he/she has met the requirements.

Lower-Division Common Prerequisites

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3

[1]Requires field experience of 15 clock hours outside of class time.

Additional General Education Requirements (15)

These 15 hours are required beyond those taken to meet General Education requirements and must be from the following liberal arts and sciences areas:

fine arts or humanities
political sciences, sociology, economics, cultural geography, or speech
mathematics
natural sciences and/or psychology

Among these 15 hours must be included one course in mathematics and, combined with General Education requirements, two courses in the natural sciences. At least one course taken to meet the natural science requirements in general education and/or prerequisites must include a laboratory component.

In addition to EDG 2701, students must take six credit hours with an international or diversity focus in lower division.

Upper Division Program: (65)

Minimum acceptable grade is "C"

Block I Philosophical/Ethical Issues (12)

EDF 3515	Historical/Philosophical Foundations of Education	3
EDE 3xxx	Issues in Elementary Education*	3
EEX 3012	Education Foundations for Exceptionalities	3
SCE 4310	Teaching Elementary Science****	3
EDE 4941	Field Experience, Block I*	

Block II Psychological/Development Issues (12)

EDP 3004	Educational Psychology	3
LAE 3xxx	Language & Literacy Development*	3
TSL 3370	ESOL Issues: Principles & Practices I*	3
ARE 3313	Teaching Elementary Art*	3
EDE 4941	Field Experience, Block II*	0

There are NO Block II courses during the summer semester.

Block III Pedagogical Issues (14)

Students must be fully admitted to the Department of Elementary Education before registering for any Block III courses.

EDG 3321	General Instruction Decision Making**	3
EDG 3321L	General Instruction Laboratory**	2
HLP 3013	Teaching Elementary Health & P.E. *	3
RED 4150	Teaching Primary Literacy*	3
MAE 4310	Teaching Primary Math*	3
EDE 4941	Field Experience, Block III*	0

Block IV Social/Cultural Issues (15)

EDF 4634	Cultural/Social Foundations of Education	3
TSL 4141	ESOL Issues: Principles & Practices II*	3
MUE 3210	Teaching Elementary Music*	3
RED 4311	Teaching Elementary Reading*	3
SSE 4312	Teaching Elementary Social Studies*	3
EDE 4941	Field Experience, Block IV*	0

Block V Putting Issues into Practice

Students must apply for student teaching two semesters before planning to do Block V.

EDE 4936	Senior Seminar in Elementary Education***	3
EDE 4943	Student Teaching Internship***	9

Notes on Upper Division Courses:
All courses in one block must be completed before taking any courses in the next block. If a course is not passed (minimum passing grade is "C"), no courses in the next block may be taken until the failing grade is corrected.

Part-time students must take courses in numerical order only.

*Every course marked with an asterisk requires EDE 4941, Field Experience, as a corequisite. Two hours per week per course are required. See Mrs. Boynton in ZEB 230 to select field school **after** registering for courses.

**EDG 3321 and EDG3321L must be taken together in the same semester.

***EDE 4936 and EDE 4943 must be taken together in the same semester. NO OTHER COURSES MAY BE TAKEN DURING THE STUDENT TEACHING SEMESTER.

****Programatic Professional Development in Science Education are required in blocks II, III, IV, & V.

Health, Physical Education and Recreation

Robert M. Wolff, *Associate Professor and Chairperson, Parks and Recreation Management and Sport Management*
Laura Blitzer, *Associate Professor, Physical Education*
Judith A. Blucker, *Professor, Physical Education, and Vice Provost, Budget*
Charmaine DeFrancesco, *Associate Professor, Physical Education and Sport Management*
Daniel L. Dustin, *Professor, Parks and Recreation Management*
Richard Lopez, *Associate Professor, Exercise Physiology*
Alexis McKenney, *Assistant Professor, Therapeutic Recreation*
Debra R. Trigoboff, *Instructor, Sports Medicine*
Bill Yongue, *Assistant Professor, Elementary Physical Education*

General Information

The Department of Health, Physical Education and Recreation offers five programs which lead to a Bachelor of Science degree. These programs include: Exercise Physiology, Parks and Recreation Management, Physical Education for Grades K-8, and 6-12, and Sports Management.

All stated admission requirements, which are subject to change, should be considered minima. A student who meets these minimum requirements is not automatically assured admission. It is the responsibility of the student to ensure that he/she has met the requirements. Program faculty should be consulted for academic advisement.

Bachelor of Science in Health Education

Degree Program Hours: 120

Exercise Physiology Track

The undergraduate exercise physiology track is designed to prepare individuals to work in the fields of exercise testing, cardiac rehabilitation, and adult fitness. The track will prepare students for two certification examinations offered by the American College of Sports Medicine. The first certification examination is the Exercise Test Technology examination and the second is the Health/Fitness Instructor certification.

Lower Division Preparation

To qualify for admission into the program, students must meet all published admission requirements which include: program prerequisites, General Education/Gordon Rule, GPA, ACT/SAT, and CLAST.

Upper Division Program: (60)

ZOO 3731	Human Anatomy	3
ZOO 3731L	Human Anatomy Lab	1
PCB 3703	Human Physiology I	3
PCB 3704	Human Physiology II	3
PCB 3711	Physiological Mechanisms	3
	or	
PET 4xxx	Comprehensive Conditioning of Elite Athletes	3
PCB 3241	Physiology of Aging	3
	or	
PET 4xxx	Personal Training	3
CGS 2060	Introduction to Microcomputers	3
	or	
Demonstrate Competency in Microcomputers		
HUN 2201	Principles of Nutrition	3
PEP 4111	Health/Fitness Instructor	3
PEP 4114	Exercise Specialist	3
PET 3310	Kinesiology	3
PET 3351	Exercise Physiology	3
PET 4383	Evaluation in Exercise Physiology	3
PET 4384	Exercise Test Technology	3
PET 4622	Athletic Injuries	3
PET 4622L	Athletic Injuries Lab	1
PET 4632	Advanced Treatment of Athletic Injuries	3
PET 4632L	Advanced Treatment of Athletic Injuries Lab	1
PET 4940	Internship in Exercise Physiology	1-15
Advisor approved electives		0-13

Athletic Training Track

The undergraduate athletic training track is designed to prepare individuals to work as certified athletic trainers at the high school, college, or professional level, or in the physical therapy clinical setting. The track will prepare students for the National Athletic Trainers Association Board of Certification examination. Students have the opportunity to prepare for an additional examination as a Certified Strength and Conditioning Specialist.

Lower Division Preparation

To qualify for admission into the program, students must meet all published admission requirements which include: program prerequisites, General Education/Gordon Rule, GPA, ACT/SAT, and CLAST. Students who do not meet the College admission requirements may request a formal review by: (a) writing an admission appeal letter to the Department requesting a review of the applicant's records and indicating the reason(s) special consideration should be granted to the applicant; (b) forwarding three letters of recommendation; and (c) participating in a formal interview with departmental/program faculty or representatives.

Upper Division Program: (60)

ZOO 3731	Human Anatomy	3
ZOO 3731L	Human Anatomy Lab	1
PCB 3702	Intermediate Human Physiology	3
HUN 2201	Principles of Nutrition	3
PET 3310	Kinesiology	3
PET 3351	Exercise Physiology	3
PET 4622	Athletic Injuries	3
PET 4622L	Athletic Injuries Lab	1
PET 4623	Advanced Management of Athletic Injuries	3
PET 4623L	Advanced Management of Athletic Injuries Lab	1
PET 4632	Advanced Treatment of Athletic Injuries	3
PET 4632L	Advanced Treatment of Athletic Injuries Lab	1
PET 4xxx	Advanced Treatment Athletic Injuries II	3
PET 4xxx	Advanced Treatment Athletic Injuries Lab II	1
PET 4660	Administrative Concerns in Athletic Training	3
PET 4xxx	Emergency Medicine in Athletic Training	3
PET 4xxx	Comprehensive Conditioning for the Elite Athlete	3
PET 4xxx	Advanced Strength and Conditioning	3
PET 5625	Sports Medicine	3
PET 4xxx	Senior Seminar in Athletic Training	3
PET 4940	Internship in Exercise Physiology	1-15

Bachelor of Science in Parks and Recreation Management

Degree Program Hours: 120

The Parks and Recreation undergraduate curriculum offers professional preparation programs designed to prepare students for employment in the leisure service delivery system and recreational therapy services. The program is oriented towards direct services, supervisory, and management employment opportunities.

A student may elect to gain competencies in Leisure Service Management, Parks Management, and Recreational Therapy.

Note: It is important to note that the Parks and Recreation Management curriculum is under review and changes to the curriculum are expected. Please see an advisor when scheduling courses.

Required Core Courses: (33)

LEI 3000	Leisure & Recreation in America	3
LEI 3xxx	Disabling Conditions	3
LEI 3542	Principles of Parks Recreation Management	3
LEI 3501	Liability and Law in Leisure, Recreation & Sports	3
ACG 3024	Financial Accounting for Managers	3
	or	
PAD 4223	Public Sector Budgeting	3
LEI 4940	Internship	9
LEI 4941	Internship II	9

Leisure Service Management Track: (27)

LEI 3437	Program Development in Recreation and Sports	3
LEI 3630	Care, Maintenance and Design	3
MAN 3701	Business and Society	3
LEI 4573	Leisure Services Marketing	3
LEI 4590	Seminar in Parks, Recreation and Sport Management	3
LEI 4842	Private & Commercial Sport and Recreation Management	3
Advisor approved electives		9

(Students are encouraged to use electives toward a Minor in Business, Entrepreneurship, Tourism Management, Public Administration, or Marketing, or Communication).

Parks Management Track: (27)

LEI 3437	Program Development in Recreation and Sports	3
LEI 3630	Care, Maintenance and Design	3
Two Environmental Science Courses and Labs[1]		6-8
Two Environmental Social Science Courses[1]		6
Two Environmental Electives[1]		6
Advisor approved electives:		1-3

[1]the above six courses qualify you for an Environmental Studies Certificate.

Recreational Therapy Core Courses (27)

CLP 4144	Abnormal Psychology	3
LEI 3703	Principles and Practices of Recreational Therapy	3
LEI 3724	Recreational Therapy Interventions for Persons with Disabilities	3
LEI 4700	Programming for Recreational Therapy	3
LEI 4711	Client Assessment, Evaluation and Documentation in Recreational Therapy	3
LEI 4720	Problems, Issues, and Concepts in Recreational Therapy	3
LEI 4813	Leisure Education and Facilitation Techniques	3
PET 3351	Exercise Physiology	3
Electives		3

Required Co-requisites for Recreational Therapy:
The student must have completed a minimum of 18 semester hours from three of the following six areas: adaptive physical education, biological/physical science, human services, psychology, sociology, or special education. Courses may be completed at the lower division. All internships must be done under the supervision of a full time Certified Therapeutic Recreation Specialist (CTRS).

The above proposed curricula have been designed to meet or exceed the standards established by the National Recreation and Park Association/American Association for Leisure and Recreation's Council on Accreditation and the National Council for Therapeutic Recreation Certification.

Bachelor of Science in Physical Education: Grades K-8

This program is designed for individuals who wish to become certified to teach physical education in the elementary and middle schools. Upon successful completion of the program and the requirements specified by the Florida Department of Education, degree recipients are eligible for regular teacher certification in the State of Florida.

Lower Division Common Prerequisites

Required Courses

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3

[1]Requires field experience of 15 clock hours outside of class time.

Anatomy and Physiology I with Lab	3-4
Care and Prevention of Athletic Injuries	3-4
or	
Anatomy and Physiology II	
Skills and Practices Courses in Physical Activities	4-5
Conditioning, Fitness and Wellness Courses in Physical Activities	3

In addition to EDG 2701, students must take six credit hours with an international of diversity focus in lower division. All required courses must be completed with a grade of 'C' or higher.

To qualify for admission to the program, undergraduates must have met all the lower division general education requirements including CLAST, ACT or SAT, completed 60 semester hours, and must be otherwise acceptable into the program.

Note: Students who have not completed the required courses may apply for admission if the deficiencies are not greater than eight semester hours. However, all program prerequisites must be completed before a student will be permitted to student teach. Students must meet all College of Education admission requirements.

Upper Division Program: (60)

Professional Education: (14)

EDF 4634	Cultural and Social Foundations of Education	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
EDP 3004	Educational Psychology	3
EDF 3515	Philosophical and Historical Foundations of Education	3

Subject Matter Specialization: (46)

DAE 3371	Dance in Elementary and Middle School	3
PEO 4041	Games in Elementary and Middle School	3
PEP 3205	Gymnastics in Elementary and Middle School	3
PET 3020	Foundations of Physical Education	3
PET 3310	Kinesiology	3
PET 3351	Exercise Physiology	3
PET 3640	Adapted Physical Education	3
PET 4510	Evaluation in Physical Education	3
PET 4622	Athletic Injuries	3
PET 3730	Physical Education in the Middle School	3
PET 4035	Motor Learning and Development	4
PET 4401	Administration of Physical Education and Sport	3
PET 4929	Senior Seminar	3
PET 4944	Student Teaching: Grades K-8	9

Bachelor of Science in Physical Education: Grades 6-12

Degree Program Hours: 120

This program is designed for individuals who wish to become certified to teach physical education in the middle and secondary schools. Upon successful completion of the program and the requirements specified by the Florida Department of Education, degree recipients are eligible for regular teacher certification in the State of Florida.

Lower Division Common Prerequisites

Required Courses

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3

[1]Requires field experience of 15 clock hours outside of class time.

Anatomy and Physiology I with Lab	3-4
Anatomy and Physiology II	
Skill Development Courses in Physical Activities	4-5
Conditioning, Fitness and Wellness Courses in Physical Activities	3

In addition to EDG 2701, students must take six credit hours with an international of diversity focus in lower division. All required courses must be completed with a grade of 'C' or higher.

To qualify for admission to the program, undergraduates must have

met all the Lower Division/General Education requirements including CLAST, ACT, or SAT, completed 60 semester hours, and must be otherwise acceptable into the program.

Note: All physical education majors are expected to be proficient in a variety of games, sports and dance. At the lower division, students should enroll in those courses in which they are least proficient. Students who have not completed the required courses may apply for admission. However, all program prerequisites must be completed prior to the student teaching internship.

Upper Division Program: (60)

Professional Education: (14)

EDF 4634	Cultural and Social Foundations of Education	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
EDP 3004	Educational Psychology	3
EDF 3515	**Philosophical and** Historical Foundations of Education	3

Subject Matter Specialization: (46)

PET 3020	Foundations of Physical Education	3
PET 3310	Kinesiology	3
PET 3351	Exercise Physiology	3
PET 3640	Adapted Physical Education	3
PET 4510	Evaluation in Physical Education	3
PEO 4004	Principles and Practices of Coaching	3
PET 4622	Athletic Injuries	3
PET 3730	Physical Education in the Middle School	3
PET 4035	Motor Learning and Development	4
PET 4442	Physical Education in the Secondary School	3
PEP 4102	Applied Concepts of Fitness and Health	3
PET 4401	Administration of Physical Education and Sport	3
PET 4929	Student Teaching Seminar	3
PET 4945	Student Teaching Grades 6-12	9

Applications for student teaching are due in the office of the Director of Student Teaching by July 1 for Spring semester placement, and by March 1 for Fall semester placement.

Sports Management Track

The undergraduate sports management track prepares individuals for managerial positions in the sports-related fields. The core program emphasizes the physiological and psychological aspects of sport and the development of managerial and administrative skills. Program electives allow students to pursue a specialization in the area of interest.

Lower Division Preparation

It is recommended that students complete introductory accounting and management courses, as well as, a variety of sports skill classes.

To qualify for admission into the program, students must meet all published admission requirements which include: program prerequisites, General Education/Gordon Rule, GPA, ACT/SAT, and CLAST. Students who do not meet the College admission requirements may request a formal review by: filing for a waiver. Contact the office of Student Services in EB 221 for information.

Note: The Sport Management track is under review and changes to the curriculum are expected. Please see an advisor when scheduling classes.

Upper Division Program: (60)

ENC 4240	Business Letters and Reports	3
LEI 3437	Program Development in Recreation and Sports	3
LEI 3501	Liability and Law in Leisure, Recreation & Sports	3
LEI 3542	Principles of Parks Recreation Management	3
LEI 4573	Leisure Services Marketing	3
PAD 4223	Public Sector Budgeting	3
	or	
ACG 3024	Financial Accounting for Managers	3
PET 4004	Coaching Sports	3
PET 4214	Psychology of Sport	3
PET 4251	Sociology of Sport	3
PET 4401	Administration of Physical Education And Sport	3
PET 4946	Intership in Sports Management[1]	9

[1]PET 4214 and PET 4251 should be completed during the student's senior year; PET 4946 should be completed during the student's last semester of enrollment.

Advised Program Electives (21)

Students should consult with their program advisor.

Subject Specializations

A. Dean Hauenstein, *Professor and Chairperson, Technology Education and Vocational Education*
Arnhilda Badia, *Associate Professor, Modern Language Education*
David Y. Chang, *Associate Professor, Art Education*
Myrna P. Crabtree, *Professor, Home Economics Education, Vocational Education (Family and Consumer Sciences Education)*
Mohammed K. Farouk, *Associate Professor, Social Studies, Global Education, and Director, Global Awareness Program*
Gail P. Gregg, *Assistant Professor, English Education*
Frank T. Hammons, *Associate Professor, Vocational Industrial Education*
Zhonghong Jiang, *Associate Professor, Mathematics Education and Computer Education*
Luis A. Martinez-Perez, *Associate Professor, Science Education*
Edwin McClintock, *Professor, Mathematics Education and Computer Education*
Dominic A. Mohamed, *Associate Professor, Vocational Administration and Supervision, Vocational Education*
Clem Pennington, *Associate Professor, Art Education*
Linda Spears-Bunton, *Associate Professor, English Education*
M.O. Thirunarayanan, *Associate Professor, Instructional Technology*
Robert Vos, *Associate Professor and Acting Dean, Organizational Training, Vocational Education*

The Department of Subject Specialization offers undergraduate programs leading to the Bachelor of Science degree in a variety of secondary school subject areas of specialization. State of Florida certification requirements are met for all programs preparing secondary (6-12) teachers and K-12 teachers in Art Education, Modern Language Education and Music Education. All stated admission requirements, which are subject to change, should be considered minima. A student who meets these minimum requirements is not automatically assured admission. It is the responsibility of the student to ensure that he/she has met the requirements. Program faculty should be consulted for academic advisement. The undergraduate and certificate programs are as follows:

General: Grades K - 12
- Art Education
- Modern Language Education
- Music Education

Secondary Education: Grades 6-12
- Biology Education
- Chemistry Education
- English Education
- Mathematics Education
- Physics Education
- Social Studies Education

Vocational Home Economics Education

Vocational Industrial Education with tracks in:
- Health Occupations Education
- Organizational Training

Certificate Programs
- Organizational Training
- Vocational Teacher Education
- Advanced Vocational

General Information

Upon admission to the University and to the College, each student major in the department is assigned an advisor in the teaching field who will assist the student in constructing a program of study. The program of study must comply with the goals of the student. Upon successful completion of the work specified in the program of study, the student is awarded the Bachelor of Science Degree with a major in a specified subject matter area or level of schooling (e.g., art, english, mathematics, music, vocational home economics education) and is eligible for regular teacher certification in the State of Florida upon successful completion of requirements specified by the Florida Department of Education.

Field Experiences

Most courses offered by the department require observation and participation in selected schools. The course descriptions identify the courses which require in-school classroom experiences guided by the directing classroom teacher and a College of Education faculty member.

The student teaching assignments are fulfilled in designated field centers. This experience is on a full-time basis for one semester. Permission to student-teach is contingent upon successful completion of all other requirements specified in the program of study. Students may be assigned to do their student teaching during either the Fall or Spring semesters of their senior year. There is no student teaching during the Summer semester.

Application for student teaching is the responsibility of the student. Necessary forms may be obtained from the office of the Director of Student Teaching. Deadline dates are July 1 for Spring student teaching and March 1 for Fall placement.

All stated admission requirements are to be considered minimums. A student who meets these minimum requirements is not automatically assured admission. Program admission requirements are subject to change. It is the responsibility of the student to assure that he/she has met the requirements.

Bachelor of Science in Art Education: Grades K-12

Degree Program Hours: 125

Lower Division Common Prerequisites

ART 1202	2D Design	3
ART 1203	3D Design	3
ART 1300	Drawing I	3
ART 1301	Figure Drawing I	3
ARH 2050	Art History Survey I	3
ARH 2051	Art History Survey II	3
EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology	3
	or acceptable substitute	

[1]Requires field experience of 15 clock hours outside of class time.

At least one course taken to meet the natural science requirements in General Education must include a laboratory component.

In addition to EDG 2701, students must take six credit hours with an international or diversity focus in lower division.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, ACT, or SAT, completed 60 semester hours, 2.5 GPA, be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (65)

Subject Matter Specialization: (30)

ARE 4848	Concepts in Art Education	3
ARH 4470	Contemporary Art	3
ART 3331C	Figure Drawing II	3
ART 2510C	Painting I	3

ART 2401C	Printmaking I	3
ART 2702C	Sculpture I	3
PGY 3410C	Photography	3
Art History Elective		3
Select two of the following three courses:		
ART 3110C	Ceramics	3
CTE 4471C	Creative Textiles	3
ARE 4459	New Media/Crafts	3

Professional Education: (35)

EDF 3515	Philosophical and Historical Foundations of Education	3
EDF 4634	Cultural and Social Foundations of Education	3
EDP 3004	Educational Psychology	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
ARE 4316	Special Teaching Lab Art K-5 (Fall only)	3
ARE 4341	Special Teaching Lab Art 6-12 (Fall only)	3
ARE 4935	Special Topics in Art Education	3
or advisor approved electives		3-6
ARE 4940	Student Teaching	9

Special Methods and Student Teaching

Students must complete the 14 semester hours of foundations courses, and all core courses before enrolling in 4000-level Special Teaching Lab courses. ARE 4316 and ARE 4341 must be taken before ARE 4940. Applications to student teach are due in the office of the Director of Student Teaching by July 1 for Spring semester placement.

Bachelor of Science in Biology Education: Grades 6–12

Degree Program Hours: 120

Lower Division Common Prerequisites

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3
Biology with Lab		8
Chemistry with Lab		8
or		
Physics with Lab		8
Electives in Science		6

[1]Requires field experience of 15 clock hours outside of class time.

In addition to EDG 2701, students must take six credit hours with an international or diversity focus in lower division.

To qualify for admission to the program, undergraduates must have met all the Lower Division/General Education requirements including CLAST, ACT, or SAT, completed 60 semester hours, 2.5 GPA, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (60)

Subject Matter Specialization: (30)

Genetics	4
Ecology	4
Physiology/Biochemistry	4
Electives in Biology	18

Professional Education: (30)

EDF 3515	Philosophical Historical Foundations of Education	3
EDF 3004	Educational Psychology	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
EDF 4634	Cultural and Social Foundations of Education	3
RED 4325	Special Teaching Laboratory: Reading	3
SCE 4330	Special Teaching Laboratory: Science	3
SCE 4944	Student Teaching	9
Advisor approved electives		1

Special Methods and Student Teaching

A student must complete 14 semester hours of foundations courses and all core courses before enrolling in 4000-level special methods courses. A student must enroll for SCE 4330 and SCE 4944 in consecutive semesters and SCE 4330 must be taken before SCE 4944. Applications to student teach are due in the office of the Director of Student Teaching by July 1 for Spring semester placement.

Bachelor of Science in Chemistry Education: Grades 6-12

Degree Program Hours: 120

Lower Division Common Prerequisites

Recommended Courses

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3
Biology with Lab		8
or		
Physics with Lab		8
Chemistry with Lab		8
Elective in Science		6

[1]Requires field experience of 15 clock hours outside of class time.

In addition to EDG 2701, students must take six credit hours with an international or diversity focus in lower division.

To qualify for admission to the program, undergraduates must have met all the Lower Division/General Education requirements including CLAST, ACT, or SAT, completed 60 semester hours, 2.5 GPA, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (60)

Subject Matter Specialization: (30)

Organic Chemistry I and II	6
Organic Chemistry Laboratories	3
Quantitative Analysis and Laboratories	5
Physical Chemistry and Laboratory	5
Electives in Chemistry	8
Calculus II	3

Professional Education: (30)

EDF 3515	Philosophical Historical Foundations of Education	3
EDF 3004	Educational Psychology	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
EDF 4634	Cultural and Social Foundations of Education	3
RED 4325	Special Teaching Laboratory: Reading	3
SCE 4330	Special Teaching Laboratory: Science	3

Prerequisite or corequisite of 20 hours required in subject matter specialization.

SCE 4944	Student Teaching	9
Advisor approved electives		1

Special Methods and Student Teaching

A student must complete 14 semester hours of foundations courses and all core courses before enrolling in 4000-level special methods courses. A student must enroll for SCE 4330 and SCE 4944 in consecutive semesters and SCE 4330 must be taken before SCE 4944.

Bachelor of Science in English Education: Grades 6-12

Degree Program Hours: 120

Lower Division Common Prerequisites

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3
SPC 2600	Public Speaking	3
Literature Course		3
Electives in English		9
Survey of British Literature I & II (strongly recommended)		6

[1]Requires field experience of 15 clock hours outside of class time.

At least one course taken to meet the natural science requirements in General Education must include a laboratory component.

In addition to EDG 2701, students must take six credit hours with an international diversity focus in lower division.

To qualify for admission to the program, undergraduates must have met all the Lower Division/General Education requirements including CLAST, ACT, or SAT, completed 60 semester hours, 2.5 GPA, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (60)

Subject Matter Specialization: (33)

LIN 3670	Grammatical Usage	3
	or	
LIN 4680	Modern English Grammar	3
LAE 4463	Multicultural Literature	3
LAE 4464	Adolescent Literature	3
American Literature (three hours) must be in African-American Literature and three hours in non- canonical Literature of the America's		12
English Literature		3
Shakespeare		3
Restricted electives		6

Professional Education: (31)

LAE 4192	Classroom Management for Middle/Secondary English Classrooms	2
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
EDF 4634	Cultural and Social Foundations of Education	3
EDP 3004	Educational Psychology	3
EDF 3515	Philosophical and Historical Foundations of Education	3
LAE 4335	Special Teaching Laboratory English	3
LAE 4942	Student Teaching	9
RED 4325	Reading in the Content Area	3

Special Methods and Student Teaching

A student must complete 14 semester hours of foundations courses and all core courses before enrolling in 4000-level special methods courses. A student must enroll in LAE 4335 before LAE 4942.

Bachelor of Science in Mathematics Education: Grades 6-12

Degree Program Hours: 120

Lower Division Common Prerequisites

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3
Calculus I		4
Calculus II		4
Computer Programming		3
Electives in Mathematics (strongly recommend Multivariable Calculus)		4

[1]Requires field experience of 15 clock hours outside of class time.

At least one course taken to meet the natural science requirements in General Education and/or prerequisites must include a laboratory component.

In addition to EDG 2701, students must take six credit hours with an international or diversity focus in lower division.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, ACT, or SAT, completed 60 semester hours, 2.5 GPA, and must be otherwise acceptable into the program. Minimum GPA and ACT/SAT scores do not assure admission.

Upper Division Program: (60)

Subject Matter Specialization: (30)

Thirty semester hours beyond calculus (MAC 2313 or equivalent).

COP 2210	Introduction to Prgramming	3
STA 3163	Statistical Methods I	3
STA 3164	Statistical Methods II	3
MTG 3212	College Geometry	3
MAS 3105	Linear Algebra	3
MAS 3404	History of Math	3
MAS 4213	Number Theory	3
Advisor approved electives		
Mathematics Electives		9

Professional Education: (30)

EDP 3004	Educational Psychology	3
EDF 3515	Philosophical and Historical Foundations of Education	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
EDF 4634	Cultural and Social Foundations	3
MAE 3651	Learning Math with Technology	3
MAE 4333	Special Teaching Lab Math	4
MAE 4942	Student Teaching	9

Bachelor of Science in Modern Language Education: Grades K-12

Lower Division Common Prerequisites

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3

[1]Requires field experience of 15 clock hours outside of class time.

At least one course taken to meet the natural science requirements in General Education and/or prerequisites must include a laboratory component.

In addition to EDG 2701, students

must take 6 credit hours with an international or diversity focus in lower division.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, ACT, or SAT, completed 60 semester hours, 2.5 GPA, and must be otherwise acceptable into the program.

Upper Division Program: (60)

Subject Matter Specialization: (30)

Phonetics or Contrastive Phonology	3
Introduction to Linguistics or Linguistics in Target Language	3
Civilization/Culture	6
Syntax/Composition	12
Literature in Target Language	6

Professional Education: (30)

EDF 3515	Philosophical Historical Foundations of Education	3
EDP 3004	Educational Psychology	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
EDF 4634	Cultural and Social Foundations of Education	3
FLE 4314	Methods of Teaching Modern Language in the Elementary Schools	3
FLE 4375	Methods of Teaching Modern Language at the Secondary Level	3
FLE 4942	Student Teaching	9
FLE 5908	Directed Study in Foreign Language Education	1-3

Special Methods and Student Teaching

Students must complete the 14 semester hours of foundations courses and all core courses before enrolling in 4000-level special methods courses. A student must enroll in FLE 4375, and FLE 4314 before enrolling in FLE 4942.

Bachelor of Science in Music Education: Grades K-12

Degree Program Hours: 134-135

The Bachelor of Science in Music Education degree is offered by the School of Music, within the College of Arts and Sciences. Changes of the curriculum, including new and revised courses, are done in collaboration with the College of Education to ensure compliance with certification and accreditation requirements. **Application for this major must be made to the School of Music before admittance. An audition, theory, and piano placement exams are required prior to admittance.** Any questions concerning this degree should be directed to Dr. Michael Wagner (Program Head) 305-348-2076 or to Fredrick Kaufman, Director of the School of Music 305-348-2896.

Theory (12 credits)

MUT 1111	Music Theory I	3
MUT 1112	Music Theory II	3
MUT 2116	Music Theory III	3
MUT 2117	Music Theory IV	3

Sightsinging (4 credits)

MUT 1221	Sightsinging I	1
MUT 1222	Sightsinging II	1
MUT 2226	Sightsinging III	1
MUT 2227	Sightsinging IV	1

Class Piano (2 credits)

MVK 1111	Class Piano I
MVK 1112	Class Piano II

Music Education majors must pass the Piano Proficiency; Class Piano III and IV until proficiency is pass.

Music History (12 credits)

MUH 3052	Music of the World	3
MUH 3211	Music History Survey I	3
MUH 3212	Music History Survey II	3
MUH 3371	20th Century Music	3

Music Technology (2 credits)

MUC 1342	MIDI Technology	2

Applied Music (11 credits)

Music Education majors are required to take two (2) credits of Applied Lessons each semester of their freshman and sophomore years, and one (1) credit each semester of junior year, and one (1) credit the semester not Student Teaching in the senior year.

Senior Recital (0 credits)

Music Education majors present their Senior Recital in the senior semester when not Student Teaching.

Ensembles (14 credits)

Music Education majors are required to take one major and one minor ensemble each semester. Music Education majors are not required to take ensembles while Student Teaching.

Recital Attendance (0 credits)

To be taken each semester enrolled in Applied Music.

Professional Foundation in General Education (26)

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology	3
EDG 3321	Instructional Decision Making	3
EDG 3321L	Instructional Decision Making Lab	2
EDG 3004	Educational Psychology	3
EDF 3515	Philosophical and Historical Foundations of Education	3
EDF 4643	Cultural and Social Foundations in Education	3

[1]Requires field experience of 15 clock hours outside of class time.

At least one course taken to meet the natural science requirements in General Education and/or prerequisites must include a laboratory component.

In addition to EDG 2701, students must take 6 credit hours with an international or diversity focus in lower division.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, ACT, or SAT, completed 60 semester hours, 2.5 GPA, and must be otherwise acceptable into the program.

Music Education majors choose either the choral or Instrumental Track for Conducting and Techniques course: 5 credits:

Choral Music Education

Conducting (2 credits)

MUG 4101	Basic Conducting	1
MUG 4301	Choral Conducting	1

Music Education Techniques (3 credits)

MVV 1111	Class Voices I*	1
MVV 2121	Class Voice II*	1
MVV 3630	Vocal Pedagogy**	2
MVS 1116	Guitar Skills	1

*Piano and Guitar majors only
**Voice majors for two credits, Piano/Guitar majors for one credit

OR

Instrumental Music Education

Conducting (2 credits)

MUG 4101	Basic Conducting	1
MUG 4202	Instrumental Conducting	1

Music Education Techniques (3 credits)

MUE 2440	String Techniques***	1

MUE 2450	Woodwind Techniques***	1
MUE 2460	Brass Techniques***	1
MUE 2470	Percussion Techniques***	1

****Students are exempted from their major applied tech course*

AND

Professional Foundation in Music Education (14 credits)

(Choral and Instrumental)

MUE 3340	Elementary Music Methods	3
MUE 4341	Secondary Music Methods	3
MUE 4940	Student Teaching in Music Education	9

Note: MUE 4940 is taken the semester following MUE 3340 and MUE 4341.

Bachelor of Science in Social Studies Education: Grades 6-12

Degree Program Hours: 120

Lower Division Common Prerequisites

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3

[1]Requires field experience of 15 clock hours outside of class time.

American Government 3

Choose four of the six areas for a total of 12 credit hours:

Anthropology	3
Cultural Geography	3
Economics	3
History	3
Psychology	3
Sociology	3

At least one course taken to meet the natural science requirements in General Education and/or prerequisites must include a laboratory component.

In addition to EDG 2701, students must take six credit hours with an international or diversity focus in lower division.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, ACT, or SAT, completed 60 semester hours, 2.5 GPA, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (60)

Subject Matter Specialization (30)

History	12
Economics	3
Anthropology or Sociology	3
Political Science	3
Global Perspectives	3
World Regional Geography	3
Advisor Approved Electives	3

Professional Education: (30)

EDF 3515	Philosophical and Historical Foundations of Education	3
EDF 4634	Cultural and Social Foundations of Education	3
EDP 3004	Educational Psychology	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
RED 4325	Special Teaching Laboratory: Reading	3
SSE 4380	Global Perspectives	3
SSE 4384	Special Teaching Laboratory: Social Studies	3
SSE 4942	Student Teaching	9
SSE 5908	Directed Study in Social Studies	1

Special Methods and Student Teaching

Students must complete 14 semester hours of foundation courses, and all core courses before enrolling in 4000 level Special Teaching Lab courses. A student must enroll for SSE 4384 and SSE 4942 in consecutive semesters and SSE 4384 must be taken before SSE 4942.

Bachelor of Science in Vocational Home Economics Education (Family and Consumer Sciences Education)

Degree Program Hours: 120

Lower Division Common Prerequisites

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3

[1]Requires field experience of 15 clock hours outside of class time.

Plus one course from each of the following areas:

Applied Art	3
Chemistry	3
Economics	3
Psychology	3
Political Science	3

At least one course taken to meet the natural science requirements in General Education and/or prerequisites must include a laboratory component.

In addition to EDG 2701, students must take six credit hours with an international or diversity focus in lower division.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, ACT, or SAT, completed 60 semester hours, 2.5 GPA, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (60)

Professional Education: (35)

EDF 3515	Philosophical and Historical Foundations of Education	3
EDP 3004	Educational Psychology	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
EDF 4634	Cultural and Social Foundations	3
RED 4325	Special Teaching Lab: Reading	3
HEE 3302	Curriculum Development in Vocational Home Economics	3
HEE 4104	Instruction in Vocational Home Economics	3
HEE 4944	Special Teaching Laboratory: Home Economics	3
HEE 4941	Student Teaching: Home Economics	9

Technical Preparation

Total of 39 semester hours needed from lower and upper divisions:

Housing and Home Furnishings	6
Management and Family Economics	6
Family and Child Development	9
Food and Nutrition	9
Textiles and Clothing	9

Technical preparation courses are offered in the Colleges of Education, Arts and Sciences, Engineering and Applied Sciences, Health Sciences, and the School of Hospitality Management.

Bachelor of Science in Vocational Industrial Education

Degree Program Hours: 120

Lower Division Common Prerequisites

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3

Fifteen hours from a vocational speciality area.

[1]Requires field experience of 15 clock hours outside of class time.

At least one course taken to meet the natural science requirements in General Education and/or prerequisites must include a laboratory component.

In addition to EDG 2701, students must take six credit hours with an international or diversity focus in lower division.

Evidence of appropriate occupational experience must be presented prior to being admitted to the Vocational Industrial Education Bachelor of Science degree program.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, ACT, or SAT, completed 60 semester hours, 2.5 GPA, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (60)

Professional Education: (56-62)

EDP 3004	Educational Psychology	3
EDF 3515	Philosophical and Historical Foundations of Education	3
EDF 4634	Cultural and Social Foundations	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
SPC 2600	Public Speaking	3
EME 3402	Computers for Teachers	3
RED 4325	Special Teaching Laboratory: Reading	3
EVT 3065	Foundations of Vocational Education	3
EVT 3161	Instructional Materials in Vocational Industrial Education	3
EVT 3165C	Course Planning in Vocational Education	3
EVT 3367	Testing and Measurements in Vocational Education Subjects	3
EVT 3815C	Vocational Education Laboratory Management and Safety	3
EVT 4351	Teaching Limited-English Proficient Students in Vocational Education	3
EVT 4502	Introduction to Vocational Special Needs	3
EVT 4940	Special Teaching Laboratory: Vocational Industrial Education and Technical Education	3
EVT 4941	Student Teaching Vocational Industrial Education and Technical Education	9
EVT 5369	Vocational Educational Media	3
EVT 4905	Directed Study in Vocational/Technical Education	1

Health Occupations Education Track

Degree Program Hours: 120

Lower Division Common Prerequisites

Required Technical Preparation

EDF 1005	Introduction to Education[1]	3
EDG 2701	Teaching Diverse Populations[1]	3
EME 2040	Introduction to Educational Technology, or acceptable substitute	3

[1]Requires field experience of 15 clock hours outside of class time.

Fifteen hours to be courses in area of occupational specialization.

At least one course taken to meet the natural science requirements in General Education and/or prerequisites must include a laboratory component.

In addition to EDG 2701, students must take six credit hours with an international or diversity focus in lower division.

Evidence of appropriate occupational experience must be presented prior to being admitted to the Vocational Industrial Education Bachelor of Science degree program.

Occupational preparation in the student's intended area of teaching such as nursing, dental, medical laboratory technician, respiratory therapy, radiologic technology, and other allied health related occupations requiring training beyond the secondary school and licensure in the occupational area where applicable.

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, ACT, or SAT, completed 60 semester hours, 2.5 GPA, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

Upper Division Program: (60)

Professional Education: (35)

EDP 3004	Educational Psychology	3
EDF 3515	Philosophical and Historical Foundations of Education	3
EDF 4634	Cultural and Social Foundations of Education	3
EDG 3321	General Instructional Decision Making	3
EDG 3321L	General Instructional Decision Making Laboratory	2
EME 3402	Computers for Teachers	3
RED 4325	Special Teaching Laboratory: Reading	3
EVT 3065	Foundations of Vocational Education	3
	or	
EVT 5078	Technical Education in American Society	3
EVT 3165C	Course Planning in Vocational Education	3
EVT 3367	Testing and Measurements in Vocational Education	3
EVT 4351	Teaching Limited English Proficient Students in Vocational Education Subjects	3
EVT 4502	Introduction to Vocational Special Needs	3

Specialization Area Requirements: (18)

EVT 4310	Planning and Operating HOE Programs	3
EVT 4311C	Special Teaching Laboratory in HDE Programs	3
EVT 4312	Instructional Strategies and Evaluation in HOE Programs	3
EVT 4941	Student Teaching in	

	Health Occupations Education Programs	9
Advisor approved electives		7

Organizational Training Track

The Organizational Training track prepares individuals to become professional trainers and instructors in non-public school settings. The track includes course work appropriate to organizational training and has two options: (1) a 24 semester hour professional certificate program and (2) a baccalaureate degree. Both options require an internship experience in an industrial, business, public, or private organization setting. Admission to the track is open to experienced workers in industry, business, public or private organizations or agencies who hold an Associate in Arts degree or its equivalent. Minimum GPA and SAT/ACT scores do not assure admission.

This track does not lead to State of Florida Teacher Certification.

Lower Division Preparation Required Technical Preparation

To qualify for admission to the program, undergraduates must have met all the lower division/general education requirements including CLAST, ACT, or SAT, completed 60 semester hours, and must be otherwise acceptable into the program. Minimum GPA and SAT/ACT scores do not assure admission.

A minimum of two years occupational experience and technical preparation in the student's intended area of teaching is required for admission to the program.

Upper Division Preparation: (60)

Professional Education: (45)

ENC 2210	Technical Writing	3
EME 4103	Production and Use of AV/Media	3
EDP 3004	Educational Psychology	3
ADE 4384	The Adult Learner	3
ADE 4274	Organizational Training and Development	3
EVT 3165C	Course Planning in Vocational Education	3
EVT 3367	Testing and Measurements in Vocational Education Subjects	3
EVT 4351	Teaching Limited English Proficient Students in Vocational Education	3
EVT 4905	Directed Study in Vocational/Technical Education	3
EVT 4920	Group Training and Development	3
EVT 4931L	Special Topics	3
EVT 4942C	Internship: Training and Development	6
Advisor approved electives		6

Minor in Business: (15)

ACG 3024	Accounting for Managers and Investors	3
FIN 3005	Introduction to Business Finance	3
MAN 3025	Organization and Management	3
MAR 3023	Marketing Management	3
ISM 4151	Systems Management	3

Minor in Vocational Pedagogy: (15)

EME 3402	Computers for Teachers	3
EVT 3065	Foundations of Vocational Education	3
EVT 3161	Instructional Materials in Vocational Industrial Education	3
EVT 3815	Vocational Laboratory Management and Safety	3
EVT 4365	Instructional Strategies and Evaluation in Vocational and Technical Education	3

Professional Certificate in Organizational Training

The professional certificate program in Organizational Training is designed to prepare experienced workers to serve in a variety of education, training, and development settings in industry, business and/or public and private agencies and organizations. These settings include three types of training: skills and technical, management, and motivational; and four specific training and development job roles: instructor, media producer, instructional designer, and organizational developer. An internship in a training and development in a business, industrial, agency or organization setting is required.

A minimum of two years occupational experience and an associate degree or its equivalent is required for admission.

This certificate program does not lead to State of Florida Teacher Certification.

Required Program: (24)

ADE 4274	Organizational Training and Development	3
EME 3402	Computers for Teachers	3
EME 4103	Production and Use of A/V Media	3
EVT 3165C	Course Planning in Vocational Education	3
EVT 4365	Instructional Strategies and Evaluation in Vocational and Technical Education	3
EVT 4942C	Internship: Training and Development	6

Program for Vocational-Technical Teacher Education Certification

The College offers Vocational-Technical Teacher certification programs at initial, professional and advanced levels leading to the state issued certification for degree and local school district issued certification for non-degree vocational education teachers for middle, secondary and post-secondary vocational subject areas in (Industrial Education, Home Economics Education, Health Occupations Education, Public Service and Occupational Specialists). Courses for Endorsements are offered in Work Experience, Diversified Cooperative Training, Vocational Education for Speakers of Other Languages (VESOL) and Limited English Proficient (LEP). Courses are also available in Agriculture Education, Business Education and Marketing Education except in the areas of "special methods". Courses for renewal/recency of Professional Teaching and Vocational Administration and Supervision certificates are also offered. Persons seeking initial, Professional and Vocational Administration and Supervision certification are encouraged to seek a statement of eligibility from the Florida Department of Education for degreed persons and local school district vocational certification office for non-degreed teachers where they are teaching or intend to teach prior to taking courses at the university.

The college currently offers, on an annual basis, special programs of vocational teacher certification, designed in cooperation with Miami-Dade and Broward school districts. Please consult with a program advisor for further information.

Program for Advanced Vocational Teacher Certification

Special programs at advanced mastery levels in vocational teacher certification, designed in cooperation with local school districts, for salary incentives are offered by the college. Please consult with a program advisor for further information.

Course Descriptions

Definition of Prefixes

ADE - Adult Education; ARE - Art Education; BTE - Business Teacher Education; CGS - Computer Applications; CHD - Child Development; DAE - Dance Education; EDA - Education: Educational Leadership; EDE - Education: Elementary; EDF - Education: Foundations; EDG - Education: General; EDH - Education - Higher; EDP - Education: Psychology; EDS - Education: Supervision; EEC - Education: Early Childhood; EED - Education: Emotional Disorders; EEX - Education: Exceptional Child, Core Competencies; EGC - Education: Guidance and Counseling; EGI - Education: Exceptional Child, Gifted; EIA - Education: Technology; ELD - Education: Specific Learning Disabilities; EME - Education: Technology and Media; EMR - Education: Mental Retardation; ESE - Education Secondary; EVT - Education: Vocational Technical; FAD - Family Development; FLE - Foreign Language Education; HEE - Home Economics Education; HHD - Housing; HLP - Health, Leisure, and Physical Education; HME - Home Management Equipment; HOE - Health Occupations Education; LAE - Language Arts and English Education; LEI - Leisure; MAE - Mathematics Education; MHS- Mental Health Services; MUE - Music Education; PEL - Physical Education; PEM - Physical Education Activities; PEO - Physical Education Activities; PEP - Physical Education Activities; PEQ - Physical Education Professional Water; PET - Physical Education Therapy; RED - Reading Education; SCE - Science Education; SPS - School Psychology; SSE - Social Studies Education; TSL - TESOL.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering; ALT-alternate years; AR-as required.

ADE 4274 Organizational Training and Development (3). Describes role of employee training/development in a variety of organizations. History/current trends and issues/future directions noted. Training and development in specific organizations emphasized. (F, alt)

ADE 4384 The Adult Learner (3). Identifies the characteristics and evolving development of adults. Reviews the primary learning theories and analyzes those most applicable for adults as learners. (F, alt)

ADE 5081 Introduction to Adult Education and Human Resource Development (3). Developing rationale for and philosophy of human resource development/adult education: contrasting agencies, program, and curricula; analyzing factors affecting human resource development, differentiating adults and youths as learners; planning and appraising human resource development programs. (F-UP; SS-Brow)

ADE 5383 Instructional Processes in AE/HRD (3). Analyzing models for instructional design; identifying and evaluating variables related to such models; developing designs unique for adult learners and organizational needs. (SS-UP; S-Brow)

ADE 5385 Adult Teaching and Learning (3). Differentiating theories of learning in relation to teaching adults; contrasting characteristics of adults as opposed to youth; evaluating the implications of such distinctions in relation to learning situations appropriate for adults. (S-UP; F-Brow)

ADE 5935 Special Topics in Adult Education and Human Resource Development (1). 'Mini-courses' which provide for an examination of special facets of adult education and human resource development. (AR)

ARE 3313 Teaching Elementary Art (3). Provides understandings, skills, and dispositions to teach art as a mode of inquiry and creative expression to diverse populations in the preschool and elementary grades. Part of Block II. Prerequisites: Block I. Corequisite: EDE 4941, Field Experience required. Lab fee required. (F,S,)

ARE 4316 Special Teaching Laboratory: Art in Grades K-6 (3). Development of instructional skills, techniques, and strategies for teaching art in the elementary school. Laboratory and field participation required. Prerequisites: EDG 3321, EDP 3004. Minimum prerequisite or corequisite of 20 hours required in subject matter specialization. Lab fee required. (F)

ARE 4341 Special Teaching Laboratory: Art in Grades 7-12 (3). Development of instructional skills, techniques, and strategies for teaching art in the middle and senior high school. Laboratory and field participation required. Prerequisites:

EDG 3321, ARE 4316. Minimum prerequisite or corequisite of 20 hours required in subject matter specialization. Lab fee required. (F)

ARE 4459 New Media - Crafts in the Classroom (3). Understand the role and evolution of crafts in the schools, their function in child development, planning, assessment and basic production techniques with various media. Lab fee required. (F,S)

ARE 4848 Concepts in Art Education (3). Understand philosophies and events that influenced the development of Art Education and the application of Discipline-Based Art Education and Aesthetic Education to the classroom. (F,SS)

ARE 4940 Student Teaching in Art (9). Supervised teaching in an elementary and secondary school. Prerequisites: EDG 3321, ARE 4316, 4341; RED 4325, and 18 semester hours of the course work required in art. Admission to the program. (S)

ARE 5457C Introduction to Computer Art (3). Exploration of the color computer, peripherals and selected software as tools for creating expressive art. Individual art. Individual imaging projects, lesson plans, readings and presentation required. (S)

ARE 5553 Introduction to Art Therapy (3). An overview of art therapy as a verbal and nonverbal means of communication with special emphasis on psychodynamic fundamentals inherent to the process for the purpose of diagnosis, treatment, and intervention for people with special needs. (F)

ARE 5555C Advanced Art Therapy (3). Examination of strategies, techniques and current theoretical approaches in art therapy. Delineation and application of an individual field experience is required. Prerequisite: ARE 5553. (S)

ARE 5905 Directed Study in Art Education (1-3). Individual investigation and research in one or more areas of art education. Prerequisite: Consent of professor. (F,S,SS)

ARE 5945 Supervised Teaching: Art Education (6). Supervised teaching in a junior or senior high school. Prerequisites: Admission to the Alternate Track Program and completion of prerequisite course work in education and subject matter area. Supervised teaching in an elementary or secondary school. (S)

CHD 3220 Child Development: Infancy and Early Childhood (3). Systematic study of total developmental process in the child from conception through early childhood emphasizing the effects of home and family environment. Includes observational experiences. (AR)

CHD 4210 Middle Childhood and Adolescent Development (3). Extension of the study of developmental patterns of children, with emphasis on physical, intellectual, social, and emotional maturation through adolescence. Analysis of environmental and home influences. (AR)

CHD 5266 Advanced Studies in Child Development (3). Survey of current literature on selected areas, analysis of trends and issues, and investigation of recent research in Child Development. Prerequisites: CHD 3220 and CHD 4210 or approved equivalent. (AR)

CGS 5410 Logo for Educators (3). Aspects of Logo as used by educators. Creative aspects, the language, philosophy, structure, and application. Prerequisite: Computers in Classroom or equivalent. (AR)

DAE 3300 Dance in the Elementary, Middle, and Secondary School (3). Includes content and methods for teaching dance in grades K-12. Emphasis on structured multi-cultural dance forms including folk and square dance, social dance, and line dancing, field experience required (20 hours). Prerequisite: Dance Departments. (AR)

DAE 3320 Dance in the Elementary and Middle School (3). The study of the scope, structure, and sequence of the dance program for grades K-8. Emphasis on educational dance and simple forms of folk and square dance. Field and laboratory experiences required. (F)

DAE 3940 Supervised Teaching in Dance (3-9). Practical application in a clinical setting of knowledge acquired in the classroom. Hours may vary.

EDE 4936 Senior Seminar in Elementary Education (3). Provides discussion of classroom management, discipline, school- community relations, and school law required of undergraduate elementary education majors while student teaching.. Prerequisites: Successful completion of all program requirements for student teaching. Corequisite: Blocks I through IV. (F,S)

EDE 4941 Field Experience: Elementary Education (0). Provides experience in observing and participating in elementary classrooms. Required of all elementary education majors in each term enrolled in a methods course. Repeatable. Corequisite: Any program course(s). May be repeated. (F,S,SS)

EDE 4943 Student Teaching Internship (9). . Provides experience in an elementary school where the student assumes all teaching responsibilities for a minimum of ten weeks. Required of undergraduate elementary education majors as culmination of program. Prerequisites: Successful completion of all program requirements. Corequisite: EDE 4936. (F,S)

EDE 5267 Education of the Child in Urban Society (3). For students desiring advanced study in the schooling of inner-city pupils in K-6. Prerequisite: EDG 3321. (AR)

EDE 5905 Directed Study in Elementary Education (1-3). Provides for individual investigation in the area of elementary education. Permission of the instructor required. (F,S,SS)

EDE 5925 Special Topics in Elementary Education (3). Opportunities to develop skills and knowledge under the guidance of a specialist in a selected area. (SS)

EDF 1005 Introduction to Education (3). Introductory survey course designed to review education and teaching in America from multiple perspectives. Required of lower division education majors. Prerequisite to admission in teacher education programs. Field experience required. (F,S,SS)

EDF 3515 Philosophical and Historical Foundations of Education (3). Initial experience in professional and pedagogical studies for persons preparing for PK-12 classrooms as well as other school personnel. Special attention will be given to the exploration of, and the implications for, educational praxis. Field experience required. (F,S,SS)

EDF 4634 Cultural and Social Foundations of Education (3). Examines the cultural and social realities of teaching and learning in the U.S. Questions of class, race, ethnicity, gender and language are discussed in

relation to effective school, teacher, and student performance. Prerequisites: EDG 3321 and EDG 3321L, EDF 3515, EDP 3004, and senior standing. Field experience required. (F,S,SS)

EDF 4780 The Teacher and the Law (3). Analysis of legal rights and responsibilities in the classroom, laws related to liability, contract, records, discipline, due process, handicapped, and schools. (AR)

EDF 5216 Effective Learning in the Classroom (3). A behavioral approach to effective teaching techniques, including theoretical background, behavioral definitions, writing effective objectives, and evaluation of effective learning in the classroom. A field experience will be included. (AR)

EDF 5432 Measurement and Evaluation in Education (3). Competencies required for the design, con- struction or selection, and evaluation of measuring instruments. Prerequisite: EDF 5481. (F,S,SS)

EDF 5481 Analysis and Application of Educational Research (3). Competencies required for the design, implementation, and evaluation of educational research, including: problem formulation and analysis; sample selection; instrument selection; formulation of research design and procedure; and data analysis. (F,S,SS)

EDF 5517 History of Education in the Changing Social and Philosophical Context of the American Republic (3). An historical examination of formal education in the changing social and philosophical context of the American republic. Special focus on school/society relationship. (AR)

EDF 5812 National Educational Systems: A Comparative Analysis (3). Examination of educational structures and guiding educational objectives in a limited number of both developed and developing countries. Analysis of responses of national educational systems to common educational issues. (F)

EDF 5820 Latin American Education: An Historic and Contemporary Overview (3). Historical and current development of Latin American Education, and analysis of principal forces shaping this development. (AR)

EDF 5821 African Educational Systems: A Comparative Approach (3). Contemporary trends and issues of education in selected independent African countries, with historical analysis of colonial educational policies and practices. (AR)

EDF 5851 Socio/Cultural Conflict in Educational Change (3). Explores radical interpretations of the relationship of education to development in the Third World. Emphasis will be placed on the problem of values conflict and on the use of appropriate educational technologies. (AR)

EDF 5852 Educational Development Issues in Context: A Multidisciplinary Perspective (3). A critical analysis of educational reforms of the past and the present, drawing on social science research and policy issues in the Third World. (F)

EDF 5880 Intercultural Education: National and International Perspectives (3). Analysis of concepts and programs of intercultural and international education. consideration of the role of education in fostering intercultural understanding both nationally and internationally. (S)

EDF 5881 Foundations of Bilingual Education (3). Fundamental theories and models of bilingual education, and information about the historical, philosophical, theoretical and legal background for bilingual multicultural programs in the United States. (AR)

EDF 5905 Directed Study in Education (1-3). The student plans and carries out an independent study project under direction of a faculty member. Topics are to directly relate to content of education courses. Independent study may not substitute for regular course offerings. Prerequisites: Written permission of the chairman of the Division and the approval of the instructor. (F,S,SS)

EDF 5941 Practicum: Urban Elementary Schools (3). Developing teacher competencies for the urban elementary schools. (AR)

EDF 5942 Multicultural Seminar and Practicum in Urban Education (3). Effective methods of educating immigrant and other minority children. (AR)

EDF 5955 Field Study Abroad (3-6). Development of international and cross-cultural understandings of educational philosophies and systems through planned travel and study abroad. (SS)

EDG 1700 Introduction to Multicultural Education: Making Choices (3). Designed to introduce prospective teachers to the terms, concepts, elements, purposes, and objectives of multicultural education programs. Corequisite: EDG 2930. (AR)

EDG 2701 Teaching Diverse Populations (3). Introductory course designed to present the theories and realities of teaching diverse populations. Prerequisite to admission in teacher education programs. Field experience required. (F,S,SS)

EDG 3321 General Instructional Decision Making (3). Instructional decisions facing classroom teachers including HOTS, multiple intelligence, learning styles, technology, theory and models of instruction. Corequisite: EDG 3321L. Field experiecne required. (F,S,SS)

EDG 3321L General Instructional Decisionmaking Laboratory (2). Lab builds on theory and work class concepts through video simulations, feedback, field work, and interaction. Corequisite: EDG 3321. (F,S,SS)

EDG 4702 Educational Psychology of Multicultural Students (3). Introduction to principles and procedures utilized in teaching students from multicultural communities. Prerequisite: Associate degree equivalent and Educational Psychology. Corequisite: EDG 4703. (AR)

EDG 4703 Educational Psychology Supervised Field Experience with Multicultural Students (3). Demonstration of competencies learned throughout study program in educational psychology of multicultural students. Prerequisite: Associate degree of equivalent. (AR)

EDG 5325 Analysis of Teaching (3). Examination of the research on instruction in teaching, and the development of skills in the observation and analysis of teacher behavior. (AR)

EDG 5414 Instructional Strategies for the Classroom Teacher (3). Specifically designed for the Alternate Master's Program in Education. Focus is on generic teaching strategies suitable for teaching in South Florida. Special Emphasis will be placed on the development of competence and knowledge supportive of a reflective

practitioner. Prerequisite: Permission of the instructor. Corequisite: EDG 5414L. Field experience required. (F,SS)

EDG 5414L Instructional Strategies Lab (1). Applies basic knowledge and skills necessary for teaching. Required of all in mod-masters programs. Corequisites: EDG 5414. (F,SS)

EDG 5417 Learning Styles Applications (3). Designed to help educators use learning styles information to change instruction and improve student achievement. Prerequisite: Tentative admission to Master's program. (AR)

EDG 5707 Cultural and Cross-Cultural Studies (3). Overview of immigration patterns in U.S., discussions of theories of ethnicity, acculturation, intercultural communication. Development of teaching strategies for multicultural classrooms. Multicultural issues in elementary, secondary, adult, vocational, and special education will also be addressed. (F,S,SS)

EDG 5757 Curriculum Development for Bilingual Programs (3). Analysis of the Process of Curriculum Design and Application for Bilingual Multicultural Schooling, with an emphasis of the tools of inquiry within a context of cultural and linguistic compatibility. (AR)

EDG 5941 Practicum: Urban Secondary Schools (3). Developing teacher competencies in urban secondary schools. (AR)

EDP 3004 Educational Psychology (3). Application of principles for understanding individual differences, learning, adjustment, classroom environments, and assessment to instructional and educational issues. Challenges of diversity and teacher effectiveness are addressed. Field experience required. (F,S,SS)

EDP 5053 Educational Psychology: Principles and Applications (3). Theories, empirical bases and principles of development and individual differences, learning, learning environments, and assessmant applied to teaching at all educational levels. Challenges of diversity are emphasized. (F,SS)

EEC 4005 Early Childhood Education Programs (3). Philosophy and theories of early childhood education programs; physical, emotional, social and cognitive development. Provides strategies for working with parents and evaluating programs. Prerequisites: EDG 3321, EDG 3321L. Corequisite: EEC 4941. (F,S,SS)

EEC 4204 Curriculum and Instruction in Early Childhood Education (3). Knowledge of curriculum and instructional skills in kindergarten and primary grades. Prerequisites: EDG 3321, EDG 3321L. Corequisites: EEC 4940, EEC 4941 or EEC 4942. (F,S,SS)

EEC 4266 Curriculum Programs - Infancy (3). Comprehensive knowledge of curricula and educational programs for infants and toddlers. Prerequisites: EDG 3321, EDG 3321L. Corequisites: EEC 4940, EEC 4941 or EEC 4942. (AR)

EEC 4267 Curriculum Programs - Preschooler (3). Comprehensive knowledge of curricula and educational programs for preschoolers. Prerequisites: EDG 3321, EDG 3321L. Corequisites: EEC 4940, EEC 4941 or EEC 4942. (AR)

EEC 4301 Trends in Early Childhood Education (3). Knowledge of critical issues; skill in assessing programs; application of child development principles to study of young children. Prerequisites: EDG 3321, EDG 3321L. Corequisite: EEC 4940, EEC 4941 or EEC 4942. (F,S,SS)

EEC 4524 Development and Administration of Early Childhood Programs (3). Knowledge and skills to prepare administrators of programs for young children. Prerequisite: Background in Early Childhood Education. (AR)

EEC 4704 The Education and Development of Young Children (3). Knowledge of infant, toddler and young child's physical, intellectual, social and emotional development and educational enhancement. Prerequisites: EDG 3321, EDG 3321L. Corequisite: EEC 4940, EEC 4941 or EEC 4942. (AR)

EEC 4941 Field Experience: Early Childhood (0). Required corequisite for all Block I-IV courses. Provides experience in observing, participating, and performing tasks in pre-kindergarten, kindergarten, and primary classrooms. Corequisite: Block I, II, III, or IV courses.(S)

EEC 4943 Student Teaching (9). Required of undergraduate early childhood majors as culmination of program. Provider experience in a Pre-kindergarten or in the primary grades in an elementary school where student assumes all teaching responsibilities for a minimum of ten weeks. Corequisite: EDF 4634. Prerequisite: Successful completion of all program requirements.

EEC 5906 Directed Study in Early Childhood Education (1-3). Individual investigation in the area of preschool and early childhood education. Permission of the instructor required. (F,S,SS)

EEC 5926 Special Topics in Early Childhood Education (3). An opportunity for teachers to continue to develop competency in a specified area under the guidance of a specialist in selected fields in preschool and early childhood education. (AR)

EED 4212 Behavioral Approaches to Classroom Learning II (3). Advanced behavior management techniques to include application of theories, crisis intervention, legal issues, and counseling skills. Prerequisites: EEX 2010, 3202, SPA 3000, EEX 3221, EEX 4601. This course is taken as part of the Senior Block. (F)

EED 4243 Strategies for Teaching Students with Emotional Handicaps (3). Instructional strategies and specialized approaches for teaching emotionally handicaps. Must be taken concurrently with EED 4244, EED 4212, and EEX 4810 as 'the senior block and requires extensive field work. Prerequisite: All junior-level courses. Corequisites: EED 4212, EED 4244, EEX 4810. (F,S,SS)

EED 4244 Curriculum for Teaching Students with Emotional Handicaps (3). Concepts and skills using various curricular models designed for students with emotional handicaps. Must be taken concurrently with EED 4244 and EED 4212 as the Senior Block. Prerequisites: All junior level courses. (F)

EED 5225 Strategies for Students with Emotional Handicaps (3). Instructional strategies and specialized approaches for teaching students with emotional handicaps. Must be taken concurrently with ELD 5235 and EMR 5215 as the senior block. Prerequisites: EDG 5414, EDG 5414L, EEX 6227, EEX 6051. Extensive field work required. (F,S)

EEX 3012 Educational Needs of Students with Exceptionalities (3). Significant concepts in relation to the educational needs of students with exceptionalities. Field experience required. (F,S,SS)

EEX 3202 Personal and Social Characteristics of Students with Exceptionalities (3). Biological conditions affecting learning and their personal and social consequences including employability and transitional skills for adulthood. Field experience required. (F,S,SS)

EEX 3221 Assessment of Students with Exceptionalities (3). Basic assessment concepts and application to appropriate test selection, administration, scoring, and interpretation. Informal and formal techniques employed for purposes of gathering data for instructional planning. Prerequisites: EEX 3012, EEX 3202. Lab fee required. (F,S,SS)

EEX 4070 Children with Exceptionalities in Inclusive Settings (3). Characteristics of students with mild disabilities and techniques of identifying, assessing, managing and instructing them in general education settings.(F)

EEX 4240 Nature and Needs of Students with Mild Disabilities (3). History, etiology, characteristics, assessment and treatment of students with mild retardation, emotional handicaps and learning disabilities. Emphasis on theory, research and concepts related to curriculum, K-12. Prerequisite: EEX 3012, EEX 3202. (F,S,SS)

EEX 4601 Behavioral Approaches to Classroom Learning I (3). Introductory course in applied behavior analysis for those planning to teach students with exceptionalities. Provides concepts and skills necessary for application of operant conditioning principles. Prerequisites: EEX 3202, SPA 3000, EEX 3221. (S,SS)

EEX 4810 Practicum in Special Education (1-3). The practicum in Special Education provides opportunity for an intensive and integrated experience in the classroom under the close supervision of master teachers and university personnel. One credit is required for all students in the senior block, but may be used for variable credit up to three credits. Co-requisite: Senior status. (F)

EEX 4861 Student Teaching (9). A field experience for program majors in Special Education providing opportunities to demonstrate competencies learned throughout the program. Prerequisite: Completion of all program requirements. (S)

EEX 4905 Directed Study in Special Education (1-6). Concepts or competencies contracted between an undergraduate student and faculty member in accordance with the student's individual needs. (F,S,SS)

EEX 4936 Student Teaching Seminar in Special Education (3). Seminar required of students enrolled in the Bachelor's and Modified Master's programs in Special Education. The purpose is to support, encourage and guide students through the transition from 'learning how to teach' to independent teaching. Prerequisites: All program courses. Corequisites: EEX 4861 and EEX 6862. (F,S)

EEX 4940 Field Experience: Special Education (0). Field based course required of all special education majors. Must be successfully completed before graduating from the program. Students must register for a section of this course with each of the following method courses: RED 4150, LAE 4314, and MAE 4310. Repeatable. Corequisites RED 4150, LAE 4314, and MAE 4310. (F,S,SS)

EGI 5051 Nature and Needs of the Gifted (3). Identification and placement procedures, history of the field, and psychological factors affecting development of the gifted-talented. (F)

EGI 5232 Educational Procedures and Curriculum for Gifted (3). Basic curriculum models in education of the gifted. Relation of models to planning, implementation in traditional classrooms, resource rooms, and special classes. (S)

EIA 5905 Directed Study in Technology Education (1-3). Identification, research, and reporting on problems of interest to the student in technology education. Subject to approval of program advisor. (F,S,SS)

EIA 5925L Special Topics in Technology Education (3). Selected topics related to instructional and technical areas. (F,S)

ELD 4230 Curriculum for Teaching Students with Learning Disabilities (3). Designed to familiarize students with the terminology, characteristics, curriculum models, specialized curriculum, and instructional materials for students with learning disabilities. Field experiences required. Must be taken concurrently with Senior Block with ELD 4240 and EED 4212. Prerequisites: All junior level courses.(F)

ELD 4240 Strategies for Teaching Students with Learning Disabilities (3). Instructional strategies and specialized approaches to teaching students with learning disabilities. Must be taken concurrently with ELD 4230, EED 4212, and EEX4810 as the senior block, and requires extensive field work. Prerequisite: All junior level courses. (F,S)

ELD 5235 Strategies in Teaching Students with Learning Disabilities (3). Instructional strategies and approaches for teaching students with learning disabilities. Must be taken concurrently with EED 5225 and EMR 5215 as the Graduate Block. Extensive field work is required. Prerequisites: EDG 5414 and Lab, EEX 6051, EEX 6227. (SS)

EME 2040 Introduction to Educational Technology (3). Introduction to the use of educational technology. Examination of productivity tools, interactive multimedia, communications, educational software, instructional applications and ethical, legal, social, and professional issues.

EME 3402 Computers for Teachers (3). An introductory course focusing on instructional uses of computers in pre-college education. Designed to provide skills in using computers as a classroom tool. (F,S,SS)

EME 4103 Production and Use of Audio/Visual Media (3). Knowledge and skill in selecting and producing audio-visual media. Emphasis is placed on student production of audio and visual materials and equipment use. (AR)

EME 5315 Instructional Media (3). Development of competencies for effective selection and utilization of instructional media. Consideration of sources, selection, evaluation, and methods of implementing media. (AR)

EME 5403 Introduction to Instructional Delivery Systems (3). A study of the rapidly expanding electronic media technology and its impact on instructional delivery. Prerequisite: EME 3402 or EME 6405. (AR)

EME 5602 Multimedia in the Classroom (3). Use videodisc and compact disc formats; hypermedia; high resolution still images and graphics; audio-program material and text to improve the quality of teaching and student learning. Prerequisites: EME 3402, EME 6405, or equivalent. Corequisite: Basic knowledge of McIntosh environment. (AR)

EME 5945 Special Topics Computer Education (1-3). Offers an opportunity for teachers and trainers to participate in activities using specific computer applications. (AR)

EMR 4221 Curriculum for Teaching Students with Mental Retardation (3). Significant concepts and skills needed for educational planning, programming and placement decisions for students with mental retardation during school years. Field experiences required. Must be taken concurrently in Senior Block with EMR 4362 and EED 4212. Prerequisites: All junior level courses.(F)

EMR 4362 Strategies for Teaching Students with Mental Retardation (3). Familiarizes students with the instructional strategies and specialized approaches for teaching the mentally retarded. Must be taken concurrently with EMR 4221, EED 4212, and EEX 4810, as the Senior Block.vRequires extensive field work. Prerequisite: All junior-level courses. (F,S,SS)

EMR 5215 Strategies for Teaching Students with Mental Retardation (3). Familiarizes students with instructional strategies and specialized approaches for teaching students with mental retardation. Must be taken concurrently with EED 5225 and ELD 5235 as the Graduate Block. Requires extensive field work Prerequisites: EDG 5414, EDG 5414L, EEX 6051 and EEX 6227. (S)

EVT 3065 Foundations of Vocational Education (3). History of vocational legislation, principles and practices on the national, state, and local levels. (SS)

EVT 3161 Instructional Materials in Vocational Industrial Education (3). Evaluation of existing instructional materials and the planning and development of individualized instructional materials. (S)

EVT 3165C Course Planning (3). Knowledge of work analysis, planning, and organizing of vocational content for instruction. Prerequisite: EDG 3321. (S)

EVT 3367 Testing and Measurements in Vocational Education Subjects (3). Knowledge and skill in developing cognitive, effective and performance standards, tests, and measure ments in vocational laboratory settings. Prerequisite: EVT 3165. (SS)

EVT 3815C Vocational Education Laboratory Management and Safety (3). Knowledge and skill in analyzing, planning, organizing and controlling laboratory environments and students' safe learning activities. (F)

EVT 4164 Technical Applications in Occupational Areas (3). The incorporation of new technical knowledge and skills of an occupational area into existing vocational education courses of study. Prerequisite: EVT 4946. (F)

EVT 4280 Occupational Safety and Health (OSHA) (3). Knowledge of the history, implications, and applications of the Occupational Safety and Health Act of 1970. For vocational and technical teachers, industrial employees, and management personnel. (AR)

EVT 4310 Planning and Operating HOE Programs (3). An intermediate course that develops an understanding of health occupation education as well as skills and knowledge needed by health care professionals to plan and develop health occupations programs. Approved for "special methods of teaching health occupations education." Prerequisite EVT 3165. (AR)

EVT 4311 Special Teaching Lab in HOE Programs (3). An intermediate course that develops knowledge of institutional structure, policies and roles of school personnel combined with field and actual teaching experiences. (AR)

EVT 4312 Instructional Strategies and Evaluation in HOE Programs (3). An intermediate course that focuses on the development of skills and knowledge needed to analyze, plan, develop, execute and evaluate classroom and laboratory teaching and learning activities in health occupations education. Approved for "special methods of teaching health occupations education." Prerequisite EVT 3165. (AR)

EVT 4351 Teaching Limited English Proficient Students in Vocational Education (3). Knowledge of the history, principles, and practices, as well as skill in analyzing, planning, developing, executing, and evaluating classroom and laboratory teaching and learning activities for limited English proficient students. Meets META requirement. (F)

EVT 4365 Instructional Strategies and Evaluation in Vocational and Technical Education (3). Knowledge and skill in analyzing, planning, developing, executing and evaluation classroom and laboratory teaching and learning activities. For non-degree certification only. (AR)

EVT 4502 Introduction to Vocational Special Needs Education (3). Knowledge of historical developments, legislation, instructional strategies, and program alternatives required to instruct special needs students in vocationally related environments. (S)

EVT 4668 Emerging Emphasis in Career Education (3). A knowledge of current trends and issues in reference to developing and integrating career education into current elementary and secondary educational programs. (AR)

EVT 4905 Directed Study in Vocational/Technical Education (1-3). Identification, research, and reporting on a special problem of interest to the student. Subject to approval of program advisor. (F,S,SS)

EVT 4920 Group Training and Development (3). Knowledge and skills necessary to design, prepare, conduct, and evaluate group training and development programs. Prerequisite: Permission of the instructor. (S, alt)

EVT 4931 Special Topics (1-4). Knowledge of recent developments related to problems, practices, programs, and methodologies in organizational setting. Prerequisite: Permission of the instructor. (AR)

EVT 4940 Professional Problems in Vocational and Technical Education (3). Knowledge of institutional structure, organization, policies, and roles of school personnel, with actual teaching experience in area of specialization. (S)

EVT 4941 Student Teaching: Vocational Industrial Education and Technical Education (9). Utilization of instructional knowledge, attitudes, and skills in a variety of instructional situations in the vocational educational setting. Prerequisite: EVT 4940, EVT 4311 for Health Education majors. (F,S)

EVT 4942C Internship: Training and Development (3). Knowledge and skills in training and development in non-public school settings. Prerequisites: Admission to Organizational Training Certificate Program and permission of the instructor. (F,S,SS)

EVT 4946 Field Experience: Technical Updating (3). The identification and acquisition of current technical knowledge and skills in an occupational area. Prerequisite: Vocational certification. (F,S,SS)

EVT 4949 Occupational Experiences (3-9). Occupational skill developed via field based work-experience in industry, business, or a government agency in the occupation in which the student is preparing to teach. (F,S,SS)

EVT 4990C Credit by Examination (3-9). Technical knowledge and skills in an occupational area such as trade, industry, health and technology, as certified by recognized professional examinations such as the National Occupational Competency Test. Credits cannot be used in lieu of upper division professional program courses. (AR)

EVT 5078 Technical Education in American Society (3). Knowledge of the basic role and current status of technical education in an industrial democracy. Designed for students interested in post-secondary education. (S)

EVT 5168 Curriculum Development in Vocational Education (3). Knowledge and skill in analyzing, planning, and developing curriculum in an area of specialization. (S)

EVT 5255 Cooperative Vocational Education Programs (3). Knowledge and skill in the basic philosophy, principles, processes, and procedures of the cooperative method in vocational and technical education. (F)

EVT 5265 Supervision and Coordination of Vocational Education Programs (3). Knowledge and skill in the supervision of personnel and the coordination of work to achieve institutional goals. (F)

EVT 5315 Improvement of Teaching Strategies in Health Occupations and Nursing Education (3). First in series of graduate courses designed to prepare qualified health professionals holding bachelor's degrees with professional education skills necessary to become competent teachers. Approved for "special methods of teaching health occupations education." (AR)

EVT 5317 Occupational Analyses in Health Occupations and Nursing Education (3). Provides opportunity to expand/update the knowledge base of health care system combining experiences in health care delivery system with curriculum updating. Professional licensure and liability insurance required. May be repeated. (AR)

EVT 5369 Vocational Educational Media (3). Knowledge and skill in selecting, developing, and utilizing vocational instructional media forms to communicate or demonstrate concepts. (S)

EVT 5650 Trends and Issues in Vocational Education (3). Knowledge of the basic philosophical and curricular trends and issues in vocational-technical education at the international, national, state, and local levels. (F)

EVT 5664 Community Relations and Resources for Vocational Education (3). Knowledge and skill in developing and utilizing community resources and establishing public relations procedures and practices to implement vocational education programs. (SS)

EVT 5695 International Comparative Vocational Education (3). Knowledge in comparison of vocational education in the United States in terms of purposes, systems, and problems with those of selected foreign countries. (S)

EVT 5769 Evaluation in Vocational and Technical Education (3). Knowledge and skill in the development of criteria, tests, measurements, and analysis of data to assess teaching, learning, and objectives. (F)

EVT 5905 Directed Study in Vocational/Technical Education (1-3). Identification, research, and reporting on a special problem of interest to the student. Subject to approval of program advisor. (F,S,SS)

EVT 5925 Special Topics in Vocational Education (1-6). Selected competencies related to instructional and technical areas. (AR)

EVT 5927 Special Topics in Health Occupations Education (1-3). Selected topics related to instructional and technical areas. (AR)

FAD 3253 Parenting (3). Overview of changing concepts of parenthood and childhood. Explores contemporary issues concerning parenting with emphasis on maximizing human potential of parents and children. Open to non-majors . . Recommended prerequisite: DEP 2001. (AR)

FAD 4340/5341 Family Development: Adulthood and Aging (3). Extension of the study of developmental patterns with emphasis on physical, intellectual, social, and emotional influences with particular emphasis on the family and/or family substitute. Graduate students will have additional requirements. (AR)

FAD 5260 Family Development (3). Dynamics of family interaction and structure, including analysis of socio-economic and cultural influences, crisis-producing situations, and current issues and trends affecting the family unit. (AR)

FAD 5450 Human Sexuality (3). A cognitive overview of human sexuality. Main emphasis is on the affective dimension - an exploration of attitudes and values related to sexuality. (AR)

FLE 4151 Bilingual School Curriculum and Organization (3). Development of a theoretical understanding of the nature of a bilingualism, a rationale for bilingual education, and a set of principles and skills for organizing, bilingual-bicultural curriculum experiences in the elementary school. Prerequisite: EDG 3321. (AR)

FLE 4314 Methods of Teaching Foreign Languages in the Elementary School (3). Development of instructional skills, techniques and strategies for teaching modern languages in the elementary school. (F)

FLE 4375 Methods of Teaching Modern Language at the Secondary Level (3). Development of instructional skills, techniques, and strategies for teaching modern languages in the junior and senior high school. Prerequisite: EDG 3321. Field experience required. Minimum prerequisite or corequisite of 14 hours in subject matter specialization. (F)

FLE 4870 Teaching Spanish as a Second Language (3). Development of instructional skills, techniques, and strategies for teaching Spanish to non-native speakers of Spanish in the elementary school. Prerequisites: EDG 3321 and Spanish proficiency. (AR)

FLE 4871 Teaching Spanish to Speakers of Spanish (3). Development of understandings and teaching skills needed in presenting integrated non-

official language arts programs which would consider factors of languages and cultures in contrast. Prerequisites: EDG 3321 and Spanish proficiency. (AR)

FLE 4942 Student Teaching (9). Supervised teaching in a junior or senior high school. Prerequisites: EDG 3321, RED 4325, appropriate Special Teaching Laboratory, appropriate number of hours in subject matter specialization, and admission to the program. (S)

FLE 5895 Bilingual Education Teaching Methodologies (3). Examination of various approaches to bilingual education, including specific school and classroom organizations. Development of specific instructional strategies for bilingual students. Issues in elementary, secondary, adult, vocational, and special education will also be addressed. (AR)

FLE 5908 Directed Study in Foreign Language Education (1-3)(ARR). The student plans and carries out an independent study project under direction of a faculty member. Prerequisite: Consent of instructor. (F,S,SS)

FLE 5945 Supervised Teaching: Modern Languages (6). Supervised teaching in a junior or senior high school. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite course work in education and subject matter area. (S)

HEE 3302 Curriculum Development in Vocational Home Economics (3). Development, adaptation, and evaluation of curriculum for vocational home economics content in a variety of educational settings. Subject to approval of the instructor. (F)

HEE 4104 Instruction in Vocational Home Economics (3). Application of educational principles, practices, and techniques to the teaching of vocational home economics in varied educational settings. Subject to approval of the instructor. (F)

HEE 4941 Student Teaching in Home Economics (9). Utilization of instructional knowledge, attitudes, and skills in vocational home economics instructional settings. Prerequisites: HEE 3302, HEE 4104, HEE 4944. (S)

HEE 4944 Special Teaching Laboratory: Home Economics (3). Acquisition of knowledge of educational institutions, and utilization of planning tools and teaching skills within areas of home economics in selected educational settings. Prerequisites: HEE 3302, HEE 4104. (S)

HEE 5335 Trends and Issues in Home Economics Education (3). Analysis of current social, economic, and educational trends and issues impacting upon home economics education and their implications for current and evolving practices. (F)

HEE 5360 Teaching Child Development (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HEE 5361 Teaching Consumer Education and Family Economics (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HEE 5362 Teaching Clothing and Textiles (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HEE 5363 Teaching Family Life Education (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HEE 5364 Teaching Housing and Home Furnishings (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HEE 5365 Teaching Food and Nutrition (3). Designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational strategies. (AR)

HEE 5905 Directed Study in Home Economics Education (1-3). Designed for advanced students in home economics education who wish to pursue specialized topics. Requires prior approval of instructor. (F,S)

HEE 5927 Special Topics in Home Economics Education (1-3). Development, organization, instruction, evaluation, and administration of programs related to selected aspects of home economics education. (S)

HES 5319 Teaching Health Education (4). Students will select various modern techniques and tools for teaching health education in elementary and secondary school settings. (AR)

HHD 4420 Home Furnishings and Equipment (4). Principles involved in the construction, selection, operation, and care of furnishings and equipment and their relationship to their environmental use. (AR)

HLP 3013 Teaching Elementary Health and Physical Education (3). Understandings, skills and dispositions needed to teach health and physical education to diverse populations in the preschool and elementary grades. Part of Block III. Prerequisites: Blocks I and II. Corequisite: EDE 4941. Field experience required. (F,S,SS)

HME 4230 Management of Personal and Family Resources (3). Application of management principles to personal and family decisions including human and non-human resources. Opportunity for community observation of management decisions made by persons of various ethnic groups and/or life styles and an analysis of the effect of these decisions on family relationships and personal success. (AR)

HME 5225 Problems of Home Management in Contemporary Society (3). Influence of diversified cultural impact on management life styles, with emphasis on problems of management resources. Discussion of problems related to single-parent homes, retirement, poverty, death, working parents, migrant families, and other human situations. Prerequisites: COA 2410, HME 4230, or permission of the instructor. (AR)

HSC 5455 Basic Driver Education I (3). Knowledge of the highway transportation system, rules and regulations. For Driver Education Certification endorsement. (AR)

HSC 5456 Advanced Driver Education II (3). Advanced skills for the teaching of driver's education. Prerequisite: HSC 5455. (AR)

HSC 5465 Administration and Supervision of Driver Safety Education III (3). Competencies for teacher preparation and improvement in driver and traffic safety education. Prerequisites: HSC 5455 and HSC 5456. (AR)

LAE 4192 Classroom Management in the Middle/Secondary English Classrooms (1). Designed to provide students with the theoretical and practical principles to deal with the problems of classroom management within the concept of goals, materials, and teaching strategies that form the English language arts. Prerequisites: EDG 3321, and LAE 4335. (F,S)

LAE 4314 Teaching Elementary Language Arts (3). Knowledge and skill in developing communication enhancement through language arts activities. Prerequisites: Block I. Corequisites: EDE 4940, 4941, or EEX 4940. Field experiecne required. (F,S,SS)

LAE 4335 Special Teaching Laboratory English (3). Development of instructional skills, techniques, and strategies for teaching English in the middle school and senior high school. Prerequisite: EDG 3321. Field experience required. Prerequisite of 21 hours required in English courses beyond lower division English prerequisites for this program. Requires 2-4 hours/week field work. (F)

LAE 4463 Multicultural Perspectives in Teaching Language and Literature for Young Adolescents (3). Designed to provide students with a theoretical and practical basis for teaching and reading multicultural literature in the secondary school. (SS)

LAE 4464 Experiencing Adolescent Literature in the Middle School and Senior High School (3). An examination of the most familiar types of literature found in the middle and secondary school English curriculum today; and the development of strategies for organizing and providing a variety of literary experiences of students who differ in intellectual abilities and literary tastes. (F,SS)

LAE 4851 Teaching English as a Second Language (3). Development of instructional skills, techniques, and strategies for teaching English as a second language in the elementary school. Prerequisites: EDG 3321 and English proficiency. (AR)

LAE 4942 Student Teaching (9). Supervised teaching in a middle school or senior high school. Prerequisites: EDG 3321, RED 4325, appropriate Special Teaching Laboratory, appropriate number of hours in subject matter specialization, and admission to the program. (S)

LAE 4464 Multicultural Perspectives in Teaching Language in Literature for Young Adults (3). Designed to provide students with a theoretical and practical basis for teaching and reading multicultural literature in the secondary school. (F,S)

LAE 5355 Literacy Instruction in the Intermediate Grades (3). Understandings, skills, and dispositions needed to teach reading and writing to students who have advanced beyond beginning stages. Required for students in VE Modified Masters Program. Prerequisites: RED 5152 or equivalent. Corequisite: EEX 4940.

LAE 5415 Children's Literature (3). Knowledge and skill in critical analysis of purposes, strategies for teaching and evaluation of children's literature. Prerequisite: RED 4150 and LAE 4314 or equivalent. (AR)

LAE 5465 Adolescent Literature in Middle/Secondary Schools (3). Examines a wide variety of adolescent and young adult literature. Assists students in the development of instructional strategies for organizing literary experiences among young learners. Prerequisite: admission into program. (F,S)

LAE 5466 Multicultural Perspectives in Teaching Language and Literature for Young Adolescents (3). Designed to provide students with a theoretical and practical basis for teaching and reading multicultural literature in the secondary school. Prerequisite: admission into the program. (F,S)

LAE 5908 Directed Study in English Education (1-3). The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor. (AR)

LAE 5927 Special Topics in Elementary Language Arts (1-3). Opportunities to develop skills and knowledge or reading/language arts instruction. (AR)

LAE 5945 Supervised Teaching: English Education (6). Supervised teaching in a middle school or senior high school. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite course work in education and subject matter area. (S)

LEI 3000 Leisure and Recreation in America (3). An introduction to the fundamental concepts of leisure and recreation and their roles in American culture. The class will be structured around a lecture-discussion format. (F)

LEI 3437 Program Development in Recreation & Sports (3). Development of objectives, planning, implementation and administration of recreation and sport programs. (S)

LEI 3501 Liability and Law in Leisure, Recreation and Sports (3). Legal issues related to leisure service management including legal foundations, legal liability, land use policy, employment regulations, handicapped services, and current issues. (S)

LEI 3524 Personnel Management in Parks and Recreation (3). After a study of human interaction in a management setting, students will demonstrate competencies necessary for hiring staff, conducting group dynamics and communicating to the public. (AR)

LEI 3542 Principles of Parks, Recreation and Sport Management (3). An exploration of the field of recreation, parks and sport, including career areas, management responsibilities and supervisory levels and principles and theory. (F)

LEI 3624 Turf Grass Management (3). A practical approach to the care and maintenance of special grasses such as those found on golf courses and other recreational facilities. (AR)

LEI 3630 Care and Maintenance of Grounds (3). A study of procedures for maintaining outdoor facilities. Students will be expected to display competence in proper maintenance of areas normally found in parks and recreation centers. (F)

LEI 3703 Principles and Practices of Recreational Therapy (3). History, philosophy and current principles of therapeutic recreation processes and application. Emphasis will be given to role of therapeutic recreation services. (F)

LEI 3723 Recreational Therapy for Cognitive and Psychosocial Disabilities: Conditions and Interventions (3). Provides "hands on" experience, as well as in-depth examination of medical aspects of disabling conditions in activity interventions for individuals with cognitive and psychosocial disabilities. Prerequisite: LEI 3703. (S)

LEI 3724 Recreational Therapy for Physical Disabilities: Conditions and Interventions (3). Designed to provide "hands on" experience, as well as in-depth examination of medical aspects of disabling conditions in activity interventions for individuals with physical disabilities. in a diversity of activity interventions. Prerequisite: LEI 3703. (F)

LEI 4573 Leisure Services Marketing (3). Application of service marketing principles and practices to both the public and private leisure service industry to improve both effectiveness and efficiency of operations. (S)

LEI 4590 Seminar in Parks and Recreation Sport Management (3). A discussion of current problems, issues and trends in parks, and sport recreation management, which will help the student develop those competencies necessary to deal with everyday aspects of particular programs. (F)

LEI 4705 Programming for Recreational Therapy (3). Principles and practices in planning and implementing programs in therapeutic recreation settings. Special emphasis will be placed on a systematic approach through problem-solving techniques. (S)

LEI 4711 Client Assessment, Evaluation and Documentation in Therapeutic Recreation (3). An overview of the theory, concepts and techniques used in client assessment, evaluation and documentation for therapeutic recreation treatment. (S)

LEI 4720 Problems, Issues & Concepts in Recreational Therapy (3). An examination of current issues, trends and professionalization concerns in therapeutic recreation. (F)

LEI 4813 Leisure Education and Facilitation Techniques (3). A focused survey of leisure education and counseling as applied in therapeutic recreation delivery systems. (F)

LEI 4842 Private and Commercial Recreation & Sports Management (3). Identification, development, operation and impact of profit-oriented recreation and sport-related enterprises. (AR)

LEI 4931 Special Topics: Leisure Service Management (1-3). Analyzes and utilizes recent developments related to problems, practices, contemporary issues, practices and methodologies in Leisure Service Management. Permission of the instructor. (S,F)

LEI 4940 Internship I (9). An on-the-job training program designed to enable students to develop those competencies which can only be gained from practical experience. (SS,AR)

LEI 4941 Internship II (9). Advanced undergraduate supervised internship in a parks and recreation or recreational therapy organizations. Prerequisites: LEI 4940 and permission of the instructor. (SS,AR)

LEI 5440 Program Development in Parks, Recreation and Sport (3). The development of specific programs in parks, recreation, and sports. (S)

LEI 5503 Liability and Law in Leisure, Recreation and Sports (3). A detailed analysis of legal issues related to leisure service, delivery and sport management including legal foundations, legal liability, disabled services and current case analysis. (F,S)

LEI 5510 Program Administration in Parks, Recreation and Sport (3). A detailed analysis of administrative procedures and responsibilities in connection with parks, recreation and sport facilities and personnel. (F)

LEI 5595 Seminar in Parks, Recreation and Sport Management (3). A discussion of current problems, issues, and trends in administration of parks and recreation programs. (F)

LEI 5605 Philosophical and Social Bases of Parks and Recreation Planning (3). Concentration on major phases of pre-design, design, development, actualization of park and recreation facilities. Course will explore funding, budget, site selection, layout, and maintenance. (F)

LEI 5716 Program Planning in Therapeutic Recreation (3). Designed to prepare the student for the development of systematically designed therapeutic recreation service delivery programs from the viewpoint of the T.R. specialist and the T.R. administrator. (S)

LEI 5719 Client Assessment, Evaluation and Documentation in T.R. (3). Addresses client assessment, documentation and evaluation from the direct service perspective, administrative requirements, and health care regulatory agency demands. (S)

LEI 5907 Directed Study in Parks and Recreation Management (3). An opportunity for individuals interested in various aspects of park and recreation administration to work on their own under the close supervision of an advisor. Permission of the instructor is required. (F,S,SS)

MAE 3651 Learning Mathematics with Technology (3). Use innovative software and graphing calculators for students to experience learning mathematics with technology. Revisit topics of school mathematics with a problem solving approach. Corequisite: Calculus I. (F,S)

MAE 4310 Teaching Elementary Mathematics (3). Understandings, skills, and dispositions needed to teach mathematics as a mode of inquiry to diverse populations in the preschool and elementary grades. Part of Block III. Prerequisites: Block I, Block II, two college level algebra or higher level math courses. Corequisites: EEC 4941. Field experience required. (F,S,SS)

MAE 4333 Special Teaching Laboratory: Mathematics (4). Development of instructional skills, techniques, and strategies for teaching mathematics in the middle school and senior high school. Prerequisites: EDG 3321. Field experience required. Minimum prerequisite or corequisite of 24 hours in subject matter specialization, including COP 2210, MAS 3105, MAS 4213, MTG 3212, STA 3164, and approved electives; permission of the instructor required. (F)

MAE 4942 Student Teaching (9). Supervised teaching in a middle school or senior high school. Prerequisites: EDG 3321, appropriate Special Teaching Laboratory, appropriate number of hours in subject matter specialization, and admission to the program. (S)

MAE 5655 Computers in Mathematics Education (3). Examines the use of computers (microcomputers) in secondary school mathematics. Designing, evaluating, and using varied types of programs in mathematics classes. Learning to use computers to design mathematics curriculum. (F,SS)

MAE 5908 Directed Study in Mathematics Education (1-3). The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor. (F,S)

MAE 5923 Special Topics in Elementary Math Education (3). Opportunities to produce and apply materials and strategies in math education in elementary. (AR)

MAE 5945 Supervised Teaching: Mathematics Education (6). Supervised teaching in a middle or senior high school. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite course work in education and subject matter area. (S)

MHS 5340 Educational-Vocational Counseling (3). Concepts and skills pertaining to vocational development, information systems, career education programs, educational-vocational counseling, and socio-psychological influences on career development. (SS)

MHS 5400 Counseling Skills and Techniques (3). Major theoretical concepts in counseling, competencies in relationship-building, interviewing, role-playing, simulation, and micro-counseling. (AR)

MHS 5460 Crisis Counseling and Intervention (3). Prevention and intervention strategies in crisis situations including child abuse and neglect, suicide, substance abuse, AIDS, and personal loss. (AR)

MUE 3210 Teaching Elementary Music (3). Knowledge and skills for the development and implementation of music experiences in the elementary curriculum for the elementary classroom teacher. Prerequisites: Block I, Block II, Block III. Corequisite: EDE 4941. Field experience required. (F,S,SS)

MUE 3340 Elementary School Teaching Methods (3). Development of instructional skills, techniques, and strategies for elementary school classroom music for the music teacher. Laboratory and field work required. (S)

MUE 4094 Middle & Secondary School Vocal & Instrumental (3). Development of instructional skills and rehearsal technique, skills and strategies for teaching music in the middle school or senior high school. Laboratory and field work required. (F)

MUE 4940 Student Teaching in Music Education (9). Supervised teaching in an elementary and secondary school. Prerequisite: Admission to the program. (S)

MUE 5907 Directed Study in Music Education (1-3). Individual investigation in one or more areas of music education. (AR)

MUE 5928 Special Topics in Music (1-3). Applications of materials and techniques in music in a laboratory or field setting. (AR)

MUE 5945 Supervised Teaching: Music Education (6). Supervised teaching. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite course work in education and the subject matter area. (S)

Students may only take three activity courses per semester.

PEM 1104 Conditioning for Recreational Sports (1). Sports aerobics and other workout methods will be practiced to improve strength, flexibility, muscular endurance and skill level in various recreational sports. Sports participation will follow the training. Verify graduation with advisor. (F,S,SS)

PEM 1141 Aerobic Fitness (1). Provides students with the skills and knowledge necessary to achieve and maintain a desirable state of aerobic fitness. Verify graduation with advisor. (F,S,SS)

PEM 1405 Judo Self Defense (1). Students will be taught physical and mental techniques to defend themselves from personal attack. This course is repeatable. Verify graduation credit with advisor. (F,S)

PEM 1441 Karate (1). Basic techniques and advanced applications of karate techniques will be taught. The class goal will be certification in rank levels to qualified students, beginners to advanced. This course is repeatable. Verify graduation credit with advisor. (F,S)

PEM 2101 Foundations of Fitness (3). Concepts related to the evaluation, development, and maintenance of fitness, including principles of training, weight control and stress reduction. Verify graduation credit with advisor. (F,S,SS)

PEM 2131 Weight Training (1). Exercise on various strength training equipment to improve muscular endurance, strength, and flexibility. Verify graduation credit with advisor. (F,S,SS)

PEN 2132 Scuba Diving Lab (1). The lab enables divers to acquire and refine the skills needed to increase scuba proficiency. This lab is required for students taking Basic, Advanced, Rescue, or Leadership Scuba Diving. Repeatable. Verify graduation credit with advisor. Prerequisites: PEN 2136, PEN 3137, PEN 3138, or PEN 4135.

PEN 2136 Basic Scuba Diving (2). This course provides students with basic scuba knowledge and skills including diving physiology, underwater skills, safety, preparation and equipment care. Lab required. Verify graduation credit with advisor. Corequisite: PEN 2132.

PEN 2137 Advanced Scuba Diving (2). An advanced course for students with Basic Scuba training and certification. Includes advanced dive safety, underwater navigation, search and rescue techniques, etc. Lab required. Verify graduation credit with advisor. Prerequisite: PEN 2136.

PEN 2138 Scuba Rescue Diving (2). Provides skill and knowledge to prevent and manage diving risks, problems and emergencies. Includes search and rescue, first aid, CPR, oxygen administration. Lab required. Verify graduation credit with advisor. Prerequisites: PEN 3137 or permission of the instructor. Corequisite: PEN 2136L.

PEN 4135 Scuba Diving Leadership (2). Prepares advanced divers for professional roles as divemaster and assistant instructor. Requires teaching, supervision and trip planning. Lab required. Verify graduation credit with advisor. Prerequisites: PEN 3137, PEN 3138.

PEO 4004 Principles and Practices of Coaching (3). Prepares students to examine the organization, philosophies, and skills necessary for coaching interscholastic sports in a diverse, educational environment. (SS)

PEO 4041 Games in the Elementary and Middle School (3). The study of the scope, structure, and sequence of games in Grades K-8. Emphasis on educational games and skill progressions for selected sports. Field experience required. (SS)

PEP 3205 Gymnastics in the Elementary and Middle School (3). The study of the scope, structure, and sequence of the gymnastics program in grades K-8. Emphasis on educational

gymnastics and simple formal gymnastics. (S)

PEP 4102 Applied Concepts of Fitness and Health (3). Content and methods for teaching activity/theory classes in which the primary emphasis is the development of fitness. Prerequisites: PET 3351and EDG 3321. (S)

PEP 4111 Health/Fitness Instruction (3). Knowledge and skills to evaluate one's fitness level and to design exercise and health enhancement programs for healthy individuals. Prerequisite: PET 3351. (F)

PEP 4114 Exercise Specialist (3). Knowledge and skills necessary to prescribe and lead exercises for persons with medical limitations especially cardiovascular and related diseases. Prerequisites: PET 3351 and PET 4387. (S)

PEQ 3126 Adapted Aquatics (2). Develops competencies in adapted aquatic programs and services. May be used for adapted physical education endorsement. (AR)

PET 3020 Foundations of Physical Education (3). Examines the philosophical, historical, sociological and psychological foundations of physical education and sport. (Field experience required). (F)

PET 3310 Kinesiology (3). Students study the anatomical and mechanical principles of movement and apply this knowledge in the analysis of physical education and athletic sport activities. (Includes laboratory class periods.) Prerequisite: Anatomy. (F,S,SS)

PET 3351 Exercise Physiology (3). Immediate physiological responses to exercise and the long-term adaptations that occur as a result of training. (F,S,SS)

PET 3640 Adapted Physical Education (3). Knowledge of scientific factors and develop and implement physical education programs for special populations. Laboratory and Field Experience required. (F)

PET 3730 Physical Education in the Middle School (3). The study of the scope, structure, and sequence of the middle school physical education curriculum. Emphasis on teaching strategies, and curriculum development. Field experience required. (S)

PET 4035 Motor Learning and Development (4). Examination of the developmental aspects of movement and the factors influencing the acquisition and performance of motor skills. (F)

PET 4214 Sport Psychology (3). Concepts related to the psychological aspects surrounding sport performance will be discussed. Required course in the Undergraduate Sport Management Track. Prerequisite: Upper division status. (S)

PET 4251 Sociology of Sport (3). Basic principles of the sociological bases of sport will be presented and discussed. Required course in the Undergraduate Sport Management track. (SS)

PET 4383 Evaluation in Exercise Physiology (3). Prepares students to utilize and select or construct appropriate instruments for the assessment of fitness. Prerequisite: PET 3351. (F)

PET 4384 Exercise Test Technology (3). Knowledge and skills required to conduct an ECG monitored graded exercise test. Prerequisite: PET 3351. (F)

PET 4389 Advanced Concepts in Strength and Conditioning (3). The course is designed to prepare students for the NSCA's Certified Strength and Conditioning Specialist examination.

PET 4401 Administration of Physical Education & Sport. (3). An analysis of the organizational and administrative aspects of interscholastic & intercollegiate physical education and interscholastic & intercollegiate sport programs. (F)

PET 4442 Physical Education in the Secondary School (3). Methods, philosophy, and curriculum for physical education in the urban, culturally diverse secondary school. Field experiences required in addition to class work. EDG 3321 and EDG 3321L. (F)

PET 4510 Evaluation in Physical Education (3). Develops student competencies in motor skill testing, grading, and analysis of written and psychomotor test scores necessary for successful teaching in physical education. (S,SS)

PET 4622 Athletic Injuries (3). Students will demonstrate knowledge of the proper care and prevention of athletic injuries through the application of acceptable training techniques. (S,SS)

PET 4622L Athletic Injuries Lab (1). The practical skill of athletic injury taping for prevention and management of athletic injuries. Corequisite: PET 4622.

PET 4623 Advanced Management of Athletic Injuries (3). Students will demonstrate knowledge of special tests used for the evaluation of athletic injuries. Designed to prepare the student for certification through the National Athletic Trainers Association. Prerequisite: Anatomy and PET 4622. (F)

PET 4623L Advanced Management of Athletic Injuries Lab (1). A practical approach to the evaluation, of athletic injuries. Prerequisite: PET 4622. Corequisite: PET 4623. (F)

PET 4632 Advanced Treatments of Athletic Injuries (3). The theory behind the use of therapeutic exercise and therapeutic modalities for the care and treatment of injured athletes. Prerequisites: PET 4622. Corequisite: PET 4632L. (F)

PET 4632L Advanced Treatments of Athletic Injuries Lab. (1). Practical, hands on experience in utilizing the proper technique and understanding the reason why the use of therapeutic modalities and therapeutic exercises are used for the care and treatment of the injured athlete. Prerequisites: PET 4622. Corequisite: PET 4632.

PET 4660 Administrative Concerns in Athletic Training (3). A culmination of the nine required courses for NATA certification, including administrative techniques that will prepare the student to manage an athletic training program. Prerequisites: PET 4622, PET 4623, PET 4632.(S)

PET 4929 Senior Seminar in Physical Education (3). Required of undergraduate physical education majors in the K-8 and 6-12 programs while student teaching. Provides discussion of current issues and topics related to teaching physical education. Prerequisites: Successful completion of all program requirements. Corequisites: PET 4945 or PET 4944 or PET 4943. (F,S)

PET 4940 Internship in Exercise Physiology: Undergraduate (3). Supervised clinical experience designed to offer the student experience in graded exercise testing and exercise leadership. Prerequisites: PET 3351, PET 5387, and PEP 5115. (F,S,SS)

PET 4943 Student Teaching Grades K-12 (9). Supervised teaching in an elementary and high school. Nine weeks of the student teaching experience will be in area of concentration.

PET 4944 Student Teaching: Grades K-8 (9). Supervised teaching in an elementary school. Corequisite: PET 4929. (F,S)

PET 4945 Student Teaching: Grades 6-12 (9) Supervised teaching in a middle or secondary school. Corequisite: PET 4929. (F,S)

PET 4946 Sports Management Internship (3-9). Supervised field experience in an approved sport or recreational setting. Prerequisite: Completion of required program and elective courses. (F,S,SS)

PET 5206 Youth Sports (3). Provides insight into the issues surrounding youth sport programs including: program development and analysis, parental influences, relationship of sport to psych-socio development. (AR)

PET 5216 Sports Psychology (3). An analysis of psychological variables that influence physical performance. Intended for prospective physical educators, coaches and others interested in motor performance. (S)

PET 5238C Motor Learning for Sport Performance (3). Emphasis in this course is on current and advanced topics related to motor skill acquisition. Laboratory practices and applied techniques related to teaching are examined. (F)

PET 5256 Sociology of Sport (3). Introduction to basic principles of the sociological bases of sport and physical activity. (SS)

PET 5426 Curriculum in Physical Education (3). Emphasis on curriculum design and development for grades 6-12 Physical Education. Includes examination of objectives, content, methods of teaching and evaluation.

PET 5436 Physical Education Curriculum: K-8 (3). Examination of objectives, content, methods of teaching, and evaluative techniques in physical education. Emphasis on curriculum development and refinement of teaching skills. (AR)

PET 5447 Curriculum in Physical Education 6-12 (3). Theoretical and practical aspects of designing, developing, and implementing curriculum for the secondary school.

PET 5716 Analysis and Observation of Teaching in Physical Education (3). Analysis of the teaching-learning process in physical education. Emphasis on systematic observation instruments and guidelines for systematic development of instructional skills. (AR)

PET 5906 Directed Study in Physical Education (1-3). Students will work independently on a topic concerning some phase of physical education or sport under the guidance of a faculty member. Registration is by permission of advisor. (F,S,SS)

PET 5925 Practicum in Physical Education (1-3). Production and or application of materials and techniques for physical education in a classroom and or field setting. (S)

PET 5931 Special Topics in Exercise Physiology (1-3). Contemporary issues and practices in exercise physiology. Prerequisite: PET 3351. (AR)

PET 5936 Special Topics in Physical Education (1-3). Contemporary issues and practices in physical education and sport. (AR)

RED 4150 Teaching Primary Literacy (3). Understandings, skills, and dispositions needed to teach literacy to diverse populations in the primary grades. Prerequisites: Block I, Block II. Corequisite: EEC 4941. Field experience required. (F,S,SS)

RED 4311 Teaching Intermediate Literacy (3). Provides understandings, skills, and dispositions needed to teach literacy to diverse populations in the elementary grades. Prerequisites: Block I, Block II. Corequisite: EDE 4941. (F,S,SS)

RED 4325 Special Teaching Laboratory: Reading (3). Skills, techniques and strategies for reading in content areas. Prerequisites: EDG 3321, and EDG 3321L. (F,S,SS)

RED 5155 Literacy Instruction in the Primary Grades (3). Understandings, skills and dispositions needed to teach reading and writing to students who are beginning to become literate. Required for students in VE Modified Masters Program. Prerequisites: EDG 5415 and EDG 5415L. Corequisite: EEX 4940.

RED 5447 Analysis and Production Reading Materials (3). Exploration, creation, and evaluation of basic reading materials, commercial and non-commercial. Prerequisite: RED 4150 or equivalent. (AR)

RED 5448C Teaching Reading by Computer (3). Evaluation and creation of computer programs for teaching reading in grades 4-12. No prior computer experience is required. (AR)

RED 5911 Directed Study in Reading Education (1-3). Directed study in area of reading instruction. Permission of the instructor required. (F,S,SS)

RED 5925 Special Topics in Reading Education (3). Study in a specified area of reading education. (SS)

SCE 4310 Teaching Elementary Science (3). Understandings, skills, and dispositions needed to teach Science as a mode of inquiry to diverse populations in the preschool and elementary grades. Part of Block I-Base for zero credit. Professional Development in Science in Blocks II through V. Prerequisites: Natural Science. Corequisite: EDE 4941. Field experience required. Lab fee required. (F,S,SS)

SCE 4330 Special Teaching Laboratory: Science (3). Development of instructional skills, techniques and strategies for teaching biological and physical sciences in the senior high schools. Prerequisite: EDG 3321. Field experience required. Minimum prerequisite or corequisite of 16-20 hours in subject matter specialization. (F,SS)

SCE 4944 Student Teaching (9). Supervised teaching in a middle school or senior high school. Prerequisites: EDG 3321, RED 4325, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization. (F,S)

SCE 5905 Directed Study in Science Education (1-3). The student plans and carries out an independent study project under direction. Permission of the instructor. (F,S,SS)

SCE 5930 Special Topics in Elementary Science Education (3). Knowledge and skills, content, strategies and materials for teaching elementary science. (AR)

SCE 5945 Supervised Teaching: Science Education (6). Supervised teaching in a middle school or senior high school. Prerequisites: Admission to the Alternate Masters Track Program and completion of prerequisite course work in education and subject matter area. (F,S)

SPA 3000 Language Development and Communication Disorders. (3). Knowledge of normal acquisition of speech, language, and literacy. Includes overview of major speech/language delays and disorders, plus intervention strategies for teachers and parents. (F,SS)

SPA 3612 American Sign Language for Teachers I (4). Introductory training in basic ASL signs and historical and cultural information about the "deaf culture" for teachers. Two hrs/wk of lab required. (AR)

SPA 4613 American Sign Language for Teachers II (4). Intermediate training in ASL signs and additional information about "deaf culture" for teachers. Two hrs/wk of lab required. Prerequisite: SPA 3332C. (AR)

SSE 4117 Integrating Social Studies into Early Childhood Curriculum (3). Develops skills, understandings, and dispositions for teaching social studies to young children from diverse cultural backgrounds. Prerequisite: Block III courses. Corequisite: EEC 4940.

SSE 4312 Teaching Elementary Social Studies (3). Understandings, skills, and dispositions needed to teach Social Studies to diverse populations in the elementary grades. Prerequisites: Block I, Block II, Block III. Corequisite: EDE 4941. (F,S,SS)

SSE 4380 Developing a Global Perspective (3). Theory, content, and practice. Introduction and utilization of learning materials and teaching strategies in Global Education for K-12. (F,SS)

SSE 4384 Special Teaching Laboratory: Social Studies (3). Development of instructional skills, techniques, and strategies for teaching social studies in the middle school and senior high school. Prerequisite: EDG 3321. Field experience required. (F)

SSE 4942 Student Teaching (12). Supervised teaching in a middle school or senior high school. Prerequisites: EDG 3321, RED 4325, appropriate Special Teaching Laboratory, appropriate number of hours in subject matter specialization, and admission to the program. (S)

SSE 5908 Directed Study in Social Studies Education (1-3) (ARR). The student plans and carries out an independent study project under direction. Permission of the instructor. (AR)

SSE 5929 Special Topics in Elementary Social Studies Education (3). Knowledge and skills, content, strategies and materials for teaching social studies. (F,S,SS)

SSE 5945 Supervised Teaching: Social Studies Education (6). Supervised teaching or equivalent in a middle school or senior high school. Prerequisites: Admission to the Modified Masters Track Program and completion of prerequisite course work in education and subject matter area. (S)

TLS 3370 ESOL Principles and Practices I (3). Introduces issues, principles and practices of teaching English to speakers of other languages to develop the conceptual understandings that form the foundation of knowledge necessary to successfully meet the needs of linguistically and culturally diverse students. Prerequisite: Completion of block I.

TSL 4140 Curriculum and Materials Development in ESOL (3). Applications of ESOL theories, principles, and current research in the development of curriculum and materials; required for area of concentration in TESOL and for the Florida Add-on ESOL Endorsement. (S)

TSL 4141 ESOL Issues: Principles and Practices II (3). Provides understandings, skills, and disposition needed to select, evaluate, and apply TESOL strategies in elementary classrooms. Part of Block IV. Prerequisite: Block I, II, III. Corequisite: EDE 4941.

TSL 4324 ESOL Issues and Strategies for Content Area Teachers (3). Analysis, application and adaptation of ESOL methods and materials to enhance instruction for lingusutucally and culturally diverse students. Fulfills Meta requirements.

TSL 4340 ESOL Methods for Grades K-12 (3). Development of instructional skills, techniques and strategies for teaching English to non-native speakers in grades K-12; required for area of concentration in TESOL and for the Florida Add-on ESOL Endorsement. (F,S)

TSL 4441 Testing and Evaluation in ESOL (3). Develops the knowledge necessary to select, adapt and design assessment instructions and testing techniques appropriate for language minority students in the ESOL classroom. Prerequisite: TSL 4340.

TSL 5142 Curriculum Development in English as a Second Language (3). Description, analysis, planning, design, and evaluation of curriculum in English as a second language (K-adult).

TSL 5245 Developing ESOL Language and Literacy (3). Examines how linguistic theories are applied in the classroom for the development of language and literacy in language minority students. (F,S)

TSL 5939 Principles in ESOL Testing (3). Advanced study and research on current issues in the field of ESOL testing. Topics include principles and practices of ESOL testing for classroom use, communicative language test development, criteria for evaluating testing instruments, and study of standardized ESOL tests. (AR)

College of Education

Dean **Linda P Blanton**
Associate Dean Academic Affairs **Wendy Cheyney**
Associate Dean Student, School, and Community Services **M. A. Bilbao**
Associate Dean Budget and Grants Administration **Carmen Mendez**

Chairpersons

Educational *Foundations and Professional Studies* **Robert V. Farrell**
Educational Leadership and Policy Studies **Kingsley Banya**
Educational Psychology and Special Education **Patricia Barbetta**
Elementary Education **Lynne D. Miller**
Health, Physical Education, and Recreation **Robert M. Wolff**
Subject Specializations **A. Dean Hauenstein**

Coordinators/Directors

Coordinator of Doctoral Programs **Robert Vos**
Director of Internship and Student Teaching **Karyl Boynton**
Associate Director of Student Services **Marta Vazquez-Syms**

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College of Engineering

College of Engineering

Gordon R. Hopkins, *Dean*
Sushil Gupta, *Associate Dean*
Gustavo A. Roig, *Associate Dean*
James R. Story, *Associate Dean*
Lourdes A. Meneses, *Assistant Dean*
Zully Dorr, *Development Officer*

The College of Engineering is committed to the development of professionals who will serve the community in a wide variety of fields. In addition, there are two units in the College solely devoted to research and other creative activities.

Bachelor's degree programs in the College of Engineering are offered in the following fields of study:

Chemical Engineering
Civil Engineering
Computer Engineering
Construction Management
Electrical Engineering
Industrial and Systems Engineering
Mechanical Engineering

Undergraduate Professional Certificates are available in:

Heating, Ventilation and Air Conditioning Design

The programs of the College are directed towards the practical use of scientific, engineering and technical principles to meet the objectives of industry, business, government and the public.

The College provides each student with the opportunity to develop marketable skills and to obtain an education which will prepare him or her for a rewarding career and personal growth.

Underlying the programs of the College is a recognition that the impact of technology upon the quality of life is increasing and that the proper application of technology is critical to meeting current and emerging human needs.

Educational Objectives for Engineering

All engineering programs in the college are designed to give our students an outstanding education. To illustrate the excellence of our program, please note the educational objectives below that are met in every Engineering program.

1. Develop within our graduates a basic foundation in the fundamental areas of engineering and to provide the technical proficiency needed for the professional practice of engineering.

Our graduates will be able to:

A. Design a system, component, or process to meet desired needs related to the major technical areas encompassed by engineering.
B. Design and conduct experiments and analyze and interpret data related to at least two of the major technical areas encompassed in engineering.
C. Indentify, formulate, and solve a wide range of engineering problems.
D. Apply knowledge of mathematics, science and engineering to solve a wide range of engineering problems.
E. Utilize the techniques, skills, and modern scientific tools necessary for contemporary engineering practice.

2. Develop within our graduates the ability to communicate their ideas effectively within the technical community and to the general public.

Our graduates will demonstrate an acceptable level of proficiency in:

A. Written communication
B. Graphical communication
C. Oral communication
D. Working with others as part of a multi-disciplinary team.

3. Prepare our graduates to take their places in society as responsible citizens.

Our graduates will demonstrate an appreciation for and an understanding of:

A. Contemporary issues facing society as a whole.
B. The local and global historical, social, economic, and politcal context and impact of engineering solutions to societal problems.

4. Provide our graduates with the basis for, and instill within them an appreciation for enthusiasm for, life-long scientific inquiry, learning and creativity.

Our graduates will:

A. Understand that graduation is but a beginning step in the development of professional engineering competency.
B. Appreciate the need for life-long learning to maintain and enhance the professional practice of engineering.
C. Be equipped with the basic knowledge and approach to learning that will allow them to benefit from continued scientific inquiry and learning.

5. Foster within our graduates the development of an understanding for the need to maintain the highest ethical standards in their personal and professional lives.

Our graduates will:

A. Demonstrate an understanding of professional integrity and ethical responsibilities.
B. Demonstrate an understanding of professional responsibility issues as they relate to public interest, health, and safety.

Accreditation

The Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET) accredits engineering programs on a nationwide basis. Students wishing more information about accreditation should consult their respective departmental office or the Office of the Dean. All engineering programs in the College are accredited by EAC/ABET (Chemical engineering is too new for accreditation).

Plan of Study

The subjects basic to all fields of engineering are generally studied while the student is in the first two years of undergraduate study in a pre-engineering curriculum. Specialized or departmental courses are taken in the third or fourth years with additional interspersed mathematics and humanistic-social studies. To eam a bachelor's degree in engineering, a student must complete the approved curriculum requirements, and must have a cumulative GPA of at least 2.0 on all engineering courses taken at the University.

The engineering programs include a strong engineering core foundation designed to prepare the prospective engineer not only with a broad base of fundamental courses in mathematics, sciences and technical knowledge, but also with a solid cultural background in humanities, social sciences and English. In addition to the core subjects, the student must complete an engineering discipline specialization under the direction of the respective administrative department.

Admission Preparation

Prospective students who are considering engineering should follow an academic program to meet engineering prerequisites. The student planning to transfer to the engineering program as a junior should follow a pre-engineering program in the first two years of college work. Many courses required by the engineering curriculum are specialized in their content and students need to select lower division courses with care. The normal maximum number of credits transferred from a community college is 60 semester credits.

Freshman admission to the University is determined by the admission standards of the lower division. The admitted freshmen should discuss their future program intentions with their lower division academic advisor and plan their lower level course selections towards their engineering program goals. The freshman should have had high school preparation of considerable depth and breadth. Specifically, students admitted to the lower division interested in engineering should have minimum preparation in mathematics (algebra, geometry, trigonometry, analytical geometry, or pre-calculus) and chemistry. Physics and introduction to computers are recommended, but not required. Admitted freshmen students planning to major in an engineering program should contact an advisor in their respective discipline as early as possible.

Engineering Admission Policy

The admission policy for freshmen and transfer students are different and the policies may vary in each department. (Refer to the Admission Policy in the department of your choice.)

FIU Freshmen

Students seeking admission to an undergraduate degree program will be admitted by the Admissions Office if the following criteria are met:

a. All general admission requirements of the University are satisfied.

b. In order to be admitted into upper division Engineering, a student must earn a grade of 'C' or higher in all Calculus courses, Differential Equations, Physics I with Calculus, Physics II with Calculus, and Chemistry 1. Consult the department for details.

Transfer Students

All transfer students must meet the general University requirement for admission and must pass the CLAST. There is a two step process in the evaluation of transfer credits.

a. The Office of Admissions will make a preliminary evaluation of the student's background for general compliance and determination of applicable General Education courses taken.

b. The specific department will determine the exact transfer of applicable credit. The departmental evaluation is the final word in this matter.

c. FIU adheres to the Board of Regents Articulation Agreement between the Universities and Community Colleges of the State of Florida. Therefore, transfer of credit from Florida Community Colleges is facilitated.

Preference is given to Associate of Arts degree holders from Florida Community Colleges. For holders of other degrees, it is suggested that application is made about three months prior to the beginning of the term.

For specific course requirements, see the departmental sections, shown later in the catalog.

College of Engineering Dismissal Policy

A student who has been dismissed from the University for the first time may see their advisor to begin the appeal procedure. The advisor will determine if the student is eligible to appeal the dismissal or if there is a way to lift the dismissal. If the student is eligible, he or she must make an appointment to see the chairperson or associate chairperson. The student must bring a letter stating when he or she was dismissed the first time and what he or she is going to do to ensure that he or she is not dismissed a second time. The student must also sign an agreement stating that he or she understands that the department will not allow a second reinstatement if the student is dismissed again. If the chairperson determines that the student is worthy of reinstatement, he or she will prepare and sign a memo for the Dean's consideration stating the conditions for the student to be reinstated (the student will be readmitted on academic, probation). If the student does not meet these conditions, he or she will be dismissed a second time from the program. If the student is not worthy of reinstatement, a memo from the Dean explaining why will be sent to the student and be placed in the student's file.

Any student who is dismissed a second time from FIU will not be readmitted under any circumstances. Institutional policy is that students may appeal to the Dean's Office, but only a first dismissal appeal is considered in the College of Engineering, a second dismissal appeal will not be accepted.

The College of Engineering will uphold the following institutional policies:

Academic Salvage

A student who is dismissed and subsequently receives an AA degree from another Florida public institution of higher learning can appeal to the department and may be readmitted to the program. The student's GPA will be recalculated.

Academic Amnesty

After 6 years of NOT taking courses at any College or University, a student may reapply to the program. If readmitted, a student's GPA will be set at 0.0 and all previous work at FIU will not count toward the student's GPA. However, credit for previous University courses in which the student received a minimum grade of "C" may be applied toward the degree, subject to determination by the department from which the student is attempting to earn the degree.

For more information or to find out if you are eligible, see your advisor or the latest undergraduate catalog.

Transfer of Courses to Engineering Programs

Courses from ABET-accredited universities will be transferred under the discretion of the engineering department. Course equivalencies will be determined solely by the department advisor, associate chairperson, and chairperson. Any other faculty member in the Department, College, or University cannot officially grant transfer credits under any circumstances.

Courses from non-ABET accredited programs (including Foreign institutions) will only be accepted as long as all of the following requirements are met:

a) The College/University is recognized and accredited by the appropriate governing bodies (to be determined by our office of admissions)

b) For courses that are not offered directly from the student's Engineering department at FIU, a memo must be obtained by the student from the appropriate FIU department stating that the course is equivalent to the required course at FIU.

c) Any engineering course considered for transfer must be an engineering science course at FIU. **If the course is partially or completely designated as an engineering design course at FIU, it cannot be transferred.** All transferred engineering courses must have the consent of the chairperson or associate chairperson of the student's department.

d) The student must earn the equivalent grade to what is required in the courses here at FIU (i.e., if a department requires a "C" in Physics, then the student must earn a grade equivalent to a "C" at their university of origin).

e) **Technology credits and life experience credits will not be accepted as engineering credits under any circumstances.**

Academic Support Services

The area of academic support services is responsible for the coordination of academic advising and student service activities for the college. This area is also responsible for keeping students informed on educational opportunities such as scholarships, tuition waivers, internships, Co-op studies and campus resources; serves as a liaison between the academic departments and the student support services university wide and facilitates the registration process in order to make sure that the students adhere to the college guidelines.

A student who has been accepted to a degree program in the College must obtain and consult an advisor prior to the first class enrollment. An advisor may be seen by contacting the Department in which an academic major is desired. Continued contact (at least once per semester) with the advisor is urged to review progress and select courses for each succeeding semester. Such contact is required until an approved program of study is completed.

Courses taken without the required prerequisites and corequisites will be dropped automatically before the end of the term, resulting in a grade of 'DR' or 'DF'.

Cooperative Education

A Cooperative Education (Co-op) Program is conducted by the College in conjunction with the Department of Cooperative Education in the Division of Student Affairs. In this program, students spend alternate semesters in school full-time and fully employed in industry in a technical position directly related to their major. Students receive full pay for their work in industry.

Placement in co-op positions is arranged by the Co-op Department and includes both local and national industrial, business and governmental agencies. Co-op students must agree to spend at least three work periods in industry.

Applicants for the program are evaluated by the College and should contact the appropriate chairperson. Because of the requirement for three work periods, students should enter the program during the first semester of the junior year. Inquiries from lower-division students, prior to transfer to the University are encouraged since work may be arranged immediately upon enrollment. The Co-op program also offers the Parallel Co-op whereby a student might alternate work and study during the same semester by attending the University part-time and working part-time in industry.

General Requirements for a Baccalaureate Degree

In order to obtain a Bachelor's degree from the College, each student must satisfy the following minimum requirements:

1. Obtain the minimum number of semester credits required by the specific program. Some majors require more than the minimum number of credits. Specific requirements beyond the minimum requirements are described in the sections devoted to the various departments in the College.

2. Complete at least 35 semester credits in the upper-division at FIU.

3. Attain a minimum grade-point average of 2.0 in all courses taken at the University.

4. Satisfy the general education requirements of the State of Florida for the Bachelor's degree.

6. Satisfy the particular requirements for his or her own major and all University requirements for graduation.

Scientific Laboratory Fee

Scientific laboratory fees are now being assessed for certain courses where laboratory classes are part of the curriculum. Specific information on scientific laboratory fees may be obtained from the academic departments or University Financial Services.

Prerequisites

Students must have met the prerequisites and corequisites to register for any course. Otherwise, the student will be dropped from the course before the end of the term, resulting in a grade of DR or DF. Students should refer to the Catalog or see an advisor to determine course prerequisites.

Course Repeats

This varies depending upon the particular program. For more information consult your advisor or Chairperson.

Academic Appeal Procedures

Academic Appeals not covered under the Academic Misconduct Policy shall be processed in the following manner:

1. The student and faculty member will meet informally in an attempt to resolve the problem within 10 days of the alleged occurrence.

2. If the informal meeting does not result in an acceptable remedy, the student can appeal in writing to the Department/Divisional Chairperson within *ten days* of the informal meeting. The written appeal should include the nature and conditions of the problem and a summary of the informal meeting with the faculty member involved.

Within ten days of the receipt of the written appeal, the Chairperson, student, and faculty member will meet in an attempt to resolve the problem.

3. If the results from the meeting in Step 2 are not acceptable, the student can appeal in writing to the Dean of the College within ten days. The written appeal should include the nature and conditions of the problem and a summary of the meetings in Step 1 and 2.

Within ten days of the receipt of the written appeal, the Dean will meet with the Chairperson, the student, and the faculty member in an attempt to resolve the problem.

The Dean will provide a written decision within ten days of the meeting in Step 3.

The Dean's decision is final.

Department-Specific Information

Please refer to your selected department in this catalog for additional information.

External Programs

Mercy Cruz, *FEEDS Coordinator*

Florida Engineering Education Delivery System (FEEDS) is a statewide system whereby graduate and undergraduate level engineering courses are delivered to industrial sites and cooperating centers via distance learning. Students with work and family responsibilities are offered the flexibility to take courses around their busy schedules. Courses are delivered through one or more of the following three methods: videotape (asynchronous, traditional FEEDS program); ITFS (synchronous, interactive TV that is one-way video and two-way audio); videoconferencing (synchronous, interactive TV that is two-way video and two-way audio), and web-based asynchronous networks.

Currently, students can select the necessary courses from FIU via distance learning to obtain a Master's degree in Electrical Engineering, Computer Engineering, Industrial Engineering, Manufacturing Engineering, Construction Management and Engineering Management.

A student taking a course through FEEDS must meet the same requirements as the student on campus and will earn the same credit as if he/she were to attend classes on campus. A student need not be enrolled in a graduate or undergraduate degree program in order to take a course. However, a student who intends to seek admission to a program should be aware that no more than six (6) graduate or fifteen (15) undergraduate credits are allowed to be transferred into a program.

Seminars

Review Seminars are offered for the Professional Engineer and Engineer in Training. Contact the appropriate engineering department for details.

Special Programs

The College is actively engaged in a number of special programs as a service to the community and the University. Among these programs are:

Florida Action for Minorities in Engineering (FLAME)

This is a cooperative program between Miami Coral Park Senior High School and Florida International University aimed at introducing the profession of engineering at high school students, and to identify, select, enroll and retain minority students in the engineering field. Students also registered for dual enrollment classes at FIU.

Florida/Georgia Alliance for Minority Participation (FGAMP)

This is a National Science Foundation funded program in association with Florida Agricultural and Mechanical University (FAMU), the leading institution. This program focuses on engineering, math chemistry, biology, physics, and computer science undergraduate students. Participants receive scholarships, during the entire academic year based on high GPA and being a full time student. Opportunities for summer internships are available.

Junior Engineering Technical Society (JETS/Unite)

A collaborative effort between Florida International Unversity, the US Army, and the Junior Engineering Technical Society. The JETS Unite program's goal is to increase the number of underrepresented students in the field of engineering, to improve the performance of the students in their SAT/ACT exams, develop resourceful, self motivated well rounded graduates who will be responsible and well adjusted citizens.

SECME/District Olympiad

This program is in conjunction with Dade county Public Schools and other local universities and colleges. It serves middle and high school students in a variety of competitions such as: egg drop, mouse trap car, bridge, brain bowl, etc. The College of Engineering at FIU is a co-sponsor of this activity in Dade County

Apprentice for a Positive Tomorrow (APT)

A joint program between Florida International University, Miami Douglas MacArthur High School South and the Association for Builders and Contractor, Inc. Project APT aspires to train a select group of at-risk youth for a useful and productive career as pre-apprentice electricians.

Junior Engineering Technical Society (JETS)

This program serves all public and private high schools within our geographical area with focus on a one day activity at Florida International Unversity, in which teams of high school students compete against each other and against other teams in the nation.

Proyecto Access/Miami Prep

A nationwide adaptation of the Texas Prefreshman Engineering Program. This program is a collaborative effort of the Hispanic Association of Colleges and Universities (HACU), the University of San Antonio, and the National Aeronautics and Space Administration (NASA). Its goals are to identify socially and economically disadvantaged achieving middle school students who are interested in science and engineering careers and to provide them with necessary enrichment in the pursuit of these careers.

Very Intensive Scientific Inter-Curricular Onsite Education (VISION)

Project VISION is a collaboration among the National Aeronautics and Space Adminstration (NASA), John F. Kennedy Space Center, Dade USI, the Public School System of Puerto Rico, Florida International University (leading institution) and Universidad del Turabo in Puerto Rico. Project VISION's goal is to increase the participation of middle school students in , as well as their understanding of, science, mathematics, and technology. Project VISION will apply the resources of NASA, FIU, and Universidad del Turabo to improve the quality of math and science education in selected schools in Miami, Florida and Puerto Rico. By providing university faculty and students, industry mentors, technical training and equipment and by incorporating in the middle school curriculum the vast educational resources available through NASA, project VISION aspires to encourage these youngsters to be our country's future scientists, engieers, and mathematicians.

Engineering and Technology Industry Focus Center

The purpose of this program is to identify high school students from the Greater Miami area who are socially and economically disadvantaged and interested in becoming scientists and engineers, and provide them with academic enrichment and reinforcement in the pursuit of these fields. The students have the opportunity to earn one high school credit through the course entitled Leadership Skills Development.

The Engineering and Technology Industry Focus Center is implemented as a part of the Training and Employment council of south Florida, and the summer Youth Training Program.

Academic program inlcudes:
- Introduction to Engineering
- Computer Technology
- Career Awareness
- Innovative hands-on projects and engineering labs
- Leadership Skill Development
- Field trips

The College faculty is actively engaged with business, industry and government. Faculty members participate in a variety of applied research projects in such areas as energy, transportation, solid waste disposal, biomedical devices and instrumentation, water resources, computer engineering, artificial intelligence, manufacturing, robotics, telecommunications, micro-electronics, structural systems, biotechnology, etc.

Research and Development Centers

NSF-The Center for Advanced Technology and Education—CATE

Introdutcion

The NSF-funded Center for Advanced Technology and Education (CATE) provides a computing environment capable of engaging researchers as well as facilitating classroom and laboratory-based instruction in critical technology areas. CATE constitutes an infrastructure that is viable for cutting-edge research activities providing an environment that enhances the potential for: (a) parallel and distributed processing, (b) high performance 3-D graphics for simulation, rendering, and modeling, (c) real-time processing capability, (d) operating systems, graphics, and software development that meet current standards, and (e) high-speed data acquisition, playback, analysis.

Research Areas

- Image Processing and Computer Vision
- EEG-Based Imaging
- Robotics
- Real-time and Multidimensional Signal Processing
- Confocal Microscopy
- Flow Cytometry
- Human-Computer Interface Research

Main Equipment

- ESI-256 System, an Electrical system Imaging as a Human-computer Interface for Brain Research
- Onyx Supercomputer for true supercomputing and Graphics power
- Confocal Microscope for RCM 8000 real-time confocal microscopy for time-varying 3-D imagery
- Coulter EPICS Profile II Cytometer for measuring light scatter (fluorescence or laser) of microscopic particles
- Nomadic Mobile Robot (Nomad200) with integrated sensory modules
- Workstations with 22 Indys, 11 Pentium PCs

Human Resources

Director: Malek Adjouadi, Ph.D.
Manager: Patricio Vidal, M.Sc.
Support Staff: Julio Blandon, Erika suarez, Daniela Viegas, Claudia Rodriguez, Danmary Sanchez, and Luz Camacho
Faculty: Armando Barreto, Ph.D.; James Story, Ph.D.; Gustavo Roig, Ph.D.; Wunnava Subbarao, Ph.D.; Ana Pasztor, Ph.D.; Maria Matinez, Ph.D.; and Julie jacko, Ph.D.
Student Support: 9 Graduates and 5 Undergraduates
NSF Fellows: Sonia Duranza, 1996-1999; Annette Taberner, 1997-2000; Erica Suarez, 1998-2001; and Danmary Sanchez, 1999-2002

Cardiovascular Engineering Center

Richard T. Schoephoerster, Ph.D. *Associate Professor and Director*
James E. Moore, Jr., Ph.D. *Assocaite Professor*
Ofer Amit, *Research Coordinator*

The Cardiovascular Engineering Center (CVEC) unifies the efforts of the academic, industrial and clinical sectors in advancing cardiovascular engineering science and technology. It is specifically planned with and designed to support the biomedical industry in South Florida and the $3.1 trillion world market for cardiovascular devices and instrumentation. In addition to its research efforts and collaboration with industry and clinical partners, *CVEC* serves as the research arm of the *Biomedical Engineering Institute (BMEI)*—an interdisciplinary unit within the College of Engineering that supports the Biomedical Engineering program and the subsequent research activity.

The Cardiovascular Engineering Center aims to accelerate the transfer of research to practical applications. It concentrates on design, development and enhanced implementation of diagnostic, interventional, therapeutic and replacement systems and devices associated with the cardiovascular and blood systems. Faculty from the College of Engineering, the College of Health Sciences, and the Department of Biological Sciences collaborate on research efforts in the Center. Scientists, physicians, and biomedical engineers from industry join FIU faculty in research projects.

The Cardiovascular Engineering Center has the distinct role of educating biomedical engineering professionals and preparing a workforce for the biomedical industry by contributing research opportunities for the students in the academic program. At *CVEC* students have the opportunity to participate in research assignments within a multidisciplinary environment with faculty, industry engineers, scientists, and clinicians.

Unlike traditional research *The Cardiovascular Engineering Center* supports applied research interests of industry and clinical sectors and operates in an industry environment. The students enrolled in the biomedical engineering program are exposed to this environment and are better equipped to succeed as professionals

The *CVEC* conducts research in biofluid and biosolid mechanics; experimental, mathematical and computational modeling; biomaterials; artificial heart valves; vascular grafts; stents; cardiovascular devices and instrumentation; bioimaging, signal processing and diagnostic imaging.

Drinking Water Research Center

The Drinking Water Research Center conducts basic and applied studies in the area of water resources as it relates to drinking water quality and quantity. The Center also provides the opportunity for undergraduate and graduate students to conduct independent research in cooperation with other departments in the University.

Examples of the current research projects conducted at the center include dynamic aspects of speciation of metals in the Miami River sediments in

relation to particle size distribution and chemical heterogeneity; experimental and mathematical modeling of the fate and transport of contaminants in waters of both natural and engineered systems; characterization of processes that affect the transportation of oils, fuels, and herbicides in surface and ground waters; calibration and validation of watershed management models; pesticide sorption on various geosorbents; surfactant-amended remediation; development of new and improvement of established analytical methods for measurement and detection of contaminants in water and soil by capillary gas chromatography; and the development of pollution prevention assessments in support of industrial ecology. In addition to research activities, the center also conducts short courses for training of local, regional, and national environmental

Research and Support Staff

Berrin Tansel, Ph.D., P.E., *Assocaite Professor, Civil and Environmental Engineering and Director*
Shonali Laha, Ph.D.,P.E., *Assistant Professor*
Mehrzad Mehran, Pharm.D., *Senior Research Scientist*
Nahid Golkar, M.S., *Research Scientist*

Future Aerospace Science and Technology Center for Cryoelectronics (FAST)

Grover Larkins, *Associate Professor, Electrical and Computer Engineering Department, and Director*

FAST is one of five centers created by the Air Force as part of its minority university enhancement program, providing research experience opportunities for undergraduate and graduate students in the area of Electrical Engineering.

The FAST Center evaluates novel applications of space-based cryoelectronics, initially studying new systems for reduction in losses of feed and phase shift networks in phased array transmitter systems. This involves development of low-loss active integrated low-noise phased array or post-processed phased array down-converter receiving systems, high gain-low loss, low noise micro (and later millimeter) wave circuits and systems for space based applications. Of particular interest is the ability to design and fabricate integrated systems which could be used as "steerable" phased array antennas with some frequency-agility as well.

Current research is focused on issues relating to: integration and heteroepoitaxy of the buffer and dielectric layer with the GaAs semiconductor and 123 high T_c superconductor layers; obtaining good ohmic GaAs contacts at low temperatures, tailoring the surface morphology of the high T_c superconductor to achieve a designed Q value for the passive elements, package design and testing with respect to microwave and thermal cycling consideration, and the identification and minimization of noise source.

Hemispheric Center for Environmental Technology (HCET)

M.A. Ebadian, *Professor, Mechanical Engineering Department, and Director*
Charles A. Broom, *Deputy Director*
Nick Lailas, *Senior Environmental Program Manager*
Shara Schenck, *Assistant to the Director*
Paul Szerszen, *Acting CMST Program Manager*
C.X. Lin, *MSV Program Manager*
F. Mao, *TFA Program Manager*
Joe Boudreaux, *Senior Program Manager, Oak Ridge*
Robert Rose, *D & D Program Manager*
Ana Ferreira, *ITI Program Manager*
Myrna Goss, *QA/QC Manager*
Richard Burton, *BSG Program Manager*
Stan Solomon, *Analytical Lab Program Manager*
Amer Awwad, *Senior Engineer*

The Hemispheric Center for Environmental Technology was established by Florida International University and the United States Department of Energy's Office of Science and Technology (OST) to research, develop, and demonstrate innovative environmental technologies and to establish international alliances to facilitate the implementation of these technologies.

HCET's research and development (R&D) activities focus on the decontamination and decommissioning of nuclear facilities and the management and reduction of radioactive and hazardous wastes. These R&D activities support the Department of Energy's Environmental Management programs in the areas of waste characterization, monitoring, and sensor technology; underground storage tank remediation; and decontamination and decommissioning.

HCET's mission is to develop and market technologies to solve environmental problems and foster sustainable development throughout the Americas. To achieve this end, HCET performs R & D, gathers and disseminates market and technology assessment data, facilitates technology transfer, and forms partnerships with industries and governments throughout the Americas. HCET targets its technology development for government organizations and industrial users of environmental technologies.

The foundation for HCET's technological capabilities has successfully been built within Florida International University's College of Engineering. HCET has the capability and resources to develop innovative technologies as well as assess and demonstrate technologies that have been developed or modified both in-house and by other vendors. HCET also has the expertise to comparatively evaluate emerging technologies and pursue, organize, and facilitate technology transfer from suppliers to consumers.

HCET is equipped with state-of-the-art equipment and machinery to carry out its project goals. HCET's facilities include:

- Open-Air Technology Assessment Site for conducting large-scale technology assessments
- Hazardous Materials Laboratory housing state-of-the-art rheology equipment, with the capacity to perform specialized analytical and engineering activities
- Fully-equipped Analytical Laboratory to define the chemistry and characterization of waste tank forms, evaluate contaminates in groundwater and soil, and monitor air quality levels
- Computational Fluid Dynamics facilities applying CFD techniques for modeling and analyzing the fluid flow and heat transfer in engineering systems
- Fabrication Shop capable of performing lathe operations, two-dimensional CNC milling, precision drilling and cutting, welding and woodworking
- Experimental Facilities for characterization, monitoring, and sensor technology allowing low and high temperature study,

single and two-phase flow, heat transfer and phase change, as well as sintering

HCET recently opened an office in Oak Ridge, Tennessee, to pursue new research and development opportunities in legacy waste management, materials recycling, and site reutilization.

Lehman Center for Transportation Research (LCTR)

The Lehman Center for Transportation Research (LCTR) at Florida International University was established in 1993 in honor of Congressman Bill Lehman and his tireless efforts to make South Florida a better place for all of us. The center's vision is to become a strong 'state-of-the-art' transportation research and training facility. LCTR is committed to serve and benefit our society by conducting research to improve mobility, hence the quality of life issues, develop partnerships in the transportation industry, and educate a multidisciplinary workforce to plan, design, manage and implement transportation systems.

Faculty, staff and students at LCTR are involved in research related to the planning, design and operation of transportation systems, public policy, air pollution, and the application of geographic information systems and other advanced technologies such as artificial neural networks and scientific visualization in transportation. Future plans include networking with the public and private industry to collaborate on transportation related research. In addition, applied research will be conducted on, but not limited to intelligent vehicle and highway systems.

Manufacturing Research Center (MRC)

Chin-Sheng Chen, *Professor, Industrial Engineering Department, and Director*

Kinzy Jones, *Professor, Mechanical Engineering*

Mario Sanchez, *Senior Engineer and Laboratory Manager*

Based on the priciples of concurrent engineering, the Manufacturing Reseach Center (MRC) was established to serve the manufacturing industry and facilitate manufacturing research. It aims at a seamless integration of computerized engineering systems for design, manufacturing, quality assurance, rapid prototyping, and manufacturing operations for both mechanical and electronic product design and fabrication. Silicon Graphics workstations are used as the backbone of the computer systems, on which software and hardware systems communicate and share information within MRC and are connected to external systems via the Internet. The MRC houses three main laboratories: *the Design/Manufacturing Software Systems Laboratory, the Rapid Product Realization Laboratory and the Process Characterization Laboratory.*

The *Design/Manufacturing Software Systems Laboratory* aims at integration and application of enterprise-wide manufacturing software systems via the Internet and Intranet. In collaboaration with the Engineeering Information Center (EIC) and the College of Business Administration, the laboratory supports CAD systems (Pro/ENGINEER, SolidWorks, & AutoCAD), CAM systems (E-Z CAM, MasterCAM & Deneb Robotics), APDM system (MatriOne), and an ERP system (SAP). To serve its consortium members, the laboratory provides online resources and learning materials via its website at www.eng.fiu.edu/mrc. In addition to SGI workstations, some of these systems also run on NT stations, with backup and additional computer support by the EIC, forming a designated *SGI (Silicon) Works Center art FIU.* The *SGI Works Center* allows design intent modeled in Pro-Engineer or any CAD and analyzed with finite element analysis packages. The user then uses the Deneb Robotics' software systems to create a digital manufacturing factory and animate manufacturing operations.

Integrated with the font-end designed tools, the *Rapid Product Realization Laboratory* provides a means to rapid realization of product design. The laboratory features rapid prototyping systems for both mechanical and electrical components, computer-driven manufacturing equipment, and product inspection systems for rapid verification and feedback into the design process. The rapid prototyping equipment currently consists of a 3-D Systems' 250-40 laser stereolithographic system, using laser cross-linked polymer for part realization, a Stratysis fused object modeler using polymer extrusion, and a Helisys' laser-cutting layer object (paper, ceramic tape cut-and-stack prototype system. Mechanical parts are fabricated with a Fadal VMC15 vertical machining center, a Dana CNC turning center, a wire EDM, and a plunger EDM. A Brown & Sharp coordinate measurement machine provides dimensioning analysis and geometry verification. It closes the loop from product design to prototyping and manufacturing, allowing the evaluation and development of expert manufacturing systems. The electronic manufacturing facility consists of an OZO automatic manufacturing robot that allows rapid manufacturing of printed circuit boards and high performance ceramic-based packages. The system also allows direct writing with both UV and optical photo-plotters.

The *Processess Characterization Laboratory* is currently focused on injection molding processes (including metal), with a research thrust developing in the area of rapid injection molding, using mold inserts fabricated by rapid prototyping processes. Additionally, investment casting processes, with a focus on rapid prototyping are under development. The laboratory includes an Auberg injection molder, programmable process development furnaces (hydrogen, vacuum, inert air) up to 1600°C, and a 190-ton press. The materials characterization laboratory consists of a field emission scanning electron microscope, a standard SEM (both with light element non-dispersive X-ray spectroscopy), a 200 keV transmission electron microscope with sample preparation capabilities (ion mill, dimpler, lapping fixtures), an X-ray diffractometer with 1600°C furnace, thermal analysis (DSC, TGA, DMA, thermal expansion), mechanical testing (uniaxial and cyclic loading, creep), and sample preparation and inspection capabilities. The Center is located in OE 218C. For more information, visit the MRC website at www.eng.fiu.edu/mrc or call (305) 348-6557.

Civil and Environmental Engineering

L. David Shen, P.E., T.E., *Professor and Chairperson*
Irtishad Ahmad, P.E., *Associate Professor*
Nii O. Attoh-Okine, P.E., *Assistant Professor*
Hector R. Fuentes, P.E. *Professor*
Albert Gan, *Assistant Professor*
Nestor Gomez, *Assistant Professor*
Sylvan C. Jolibois, Jr., *Assistant Professor*
Shonali Laha, P.E. *Assistant Professor*
Chunhua Liu, *Research Associate*
Beth Pascual, E.I. *Instructor/Undergraduate Advisor*
Luis A. Prieto-Portar, P.E. *Professor*
Wolfgang F. Rogge, *Assistant Professor*
Walter Z. Tang, P.E. *Associate Professor*
Berrin Tansel, P.E. *Associate Professor*
LeRoy E. Thompson, P.E. *Professor Emeritus*
Oktay Ural, P.E. *Professor*
Ton-Lo Wang, P.E. *Professor*
Fang Zhao, P.E. *Associate Professor*

Lehman Center for Transportation Research

L. David Shen, *Director*
Diana I. Ospina, *Research Associate*
Hesham Elbadrawi, *Research Associate*

Bachelor of Science in Civil Engineering

Common Prerequisites

CHM	General Chemistry I
CHM	General Chemistry Lab I
MAC 2311	Calculus I
MAC 2312	Calculus II
MAC 2313	Multivariable Calculus
PHY	Physics with Calculus
PHY	General Physics Lab I
PHY	Physics with Calculus II

Degree Program Hours: 130

The Civil Engineering curriculum provides a background of interrelated subdisciplines of Civil Engineering with the fundamental core subjects of the engineering program. The technical interdisciplinary courses are in the areas of construction, geotechnical, environmental, structures, surveying, transportation, urban planning and water resources.

Civil engineers play an essential role in serving people and the environmental needs of society. These needs relate to shelter, mobility, water, air and development of land and physical facilities.

The academic program is designed to meet the State of Florida's articulation policy as well as to satisfy criteria outlined by the Accreditation Board for Engineering and Technology (ABET). To qualify for admission to the upper division program, FIU undergraduates must have met all the lower division requirements including CLAST, completed at least 60 semester hours of pre-engineering courses which include 'C' for Engineers, Calculus I & II, Multivariable Calculus, Probability and Statistics, Differential Equations, Chemistry I & II and Labs, Physics I & II with Calculus and Labs, with a grade of 'C' or better, and with an overall GPA of 2.5 in these courses and must be otherwise acceptable into the program. See the example semester by semester program in the following pages.

Effective pursuit of engineering studies requires careful attention to both the sequence and the type of courses taken. It is therefore important, and the college requires, that each student plan a curriculum with the departmental faculty Advisor.

All students must comply with the Core Requirements for the University as well as comply with departmental requirements for Social Science, Humanities, and English. Students may find that some courses satisfy both requirements, therefore it is important to contact the department advisor for assistance. The department requires a minimum of 16 semester hours in the area of Humanities and Social Science. This should include economics (micro or macro) and all core and general education requirements. At least two of the courses should be in the same discipline area. Requirements also include Engineering Economy and Ethics and Legal Issues. All transfer students should refer to the General Information section of the catalog to determine if they have met the Core Curriculum requirements for Humanities, Social Science, and English at their previous institution. Students who transfer from a State of Florida community college with an Associate of Arts degree must fulfill departmental requirements for Social Science and Humanities.

A minimum grade of 'C' is required in all physics, chemistry and mathematics, and an overall GPA of 2.5 in these courses.

A minimum grade of 'C' is required of all engineering courses taken at the University.

Students who have been dismissed for the first time from the University due to low grades, may appeal to the Dean for reinstatement. A second dismissal results in no possibility of reinstatement.

Upper Division Course Objectives

The program of study encourages the development of a broadly educated civil engineering graduate, who can succeed as a productive engineer with a continued professional growth. The courses listed as requirements for the BS degree not only provide the students with mathematical and scientific knowledge, but also include other essentials necessary for a successful engineering career. The courses have been designed to increase student competence in written and oral communication skills as well as develop critical thinking and creative problem solving strategies. Course projects are designed to teach engineering science fundamentals and their applications while providing enriching opportunities for laboratory and computer-based experiences. Furthermore, students are supplied with an understanding of the social and ethical responsibilities of engineers in our society and are encouraged to include sustainable development in all project designs.

Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog's General Information for Admission and Registration and Records.

Upper Division Program

The basic upper division requirements for the BSCE degree are as follows:

Engineering Sciences (20)

CGS 2423	'C' for Engineers	3
CWR 3201	Fluid Mechanics	3
CWR 3201L	Fluid Mechanics Laboratory	1
EEL 3003	Electrical Engineering I *(Non EE)*	3
EGM 3520	Engineering Mechanics of Materials	3
EGM 3520L	Materials Testing Lab	1
EGN 3311	Statics	3
EGN 3321	Dynamics	3
EGN 1110C	Engineering Drawing *(Required unless previously taken)*	0

Civil Engineering Curriculum (41)

CEG 4011	Geotechnical Engineering I	3
CEG 4011L	Soil Testing Laboratory	1
CES 3100	Determinate Structural Analysis	3
CES 4605	Steel Design	3
CES 4702	Reinforced Concrete Design	3
CGN 4802	Civil Engineering Senior Design Project	3
CWR 3103	Water Resources Engineering	3
ENV 3001	Introduction to Environmental Engineering	3
ENV 3001L	Environmental Laboratory	1
SUR 3101C	Surveying	3
TTE 4201	Transportation and Traffic Engineering	3
C.E. Elective	(min)	3
C.E. Elective	(min)	3
C.E. Elective	(min)	3
C.E. Elective	(min)	3

Civil and Environmental Engineering Program

Students may have a different sequence of courses as arranged with their advisor. For a complete program information, students should refer to the Program Summary Sheet available in the Department.

First Semester: (15)

MAC 2311	Calculus I	4
CHM	General Chemistry I	
CHM	General Chemistry I Lab	
SLS 1501	Freshman Experience	1
ENC 1101	Freshman Composition	3
EGN 2030	Ethics & Legal Issues	3

Second Semester: (16)

MAC 2312	Calculus II	4
ENC 1102	Literary Analysis	3
PHY 2048	Physics with Calculus	3
PHY 2048L	General Physics Lab I	1
CGS 2423	'C' for Engineers'	3
Tech Elective		2

Suggested Summer Term: (11)

Social Science elective (ECO 2013 or ECO 2023)		3
MAC 2313	Multivariable Calculus	4
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry Lab II	1
EGN 1110C	Engineering Drawing *(Required unless previously taken)*	0

Third Semester: (15)

PHY 2049	Physics with Calculus II	3
SSI3240	World Prospect & Issues	3
MAP 2302	Differential Equations	3
Literature/Art/Foreign Language		3
Tech Elective		3

Fourth Semester: (15)

EGN 3311	Statics	3
Historical Foundations		3
Comparative Cultures		3
EEL 3003	Electrical Engineering I	3
SUR 3101C	Surveying	3

Fifth Semester: (13)

STA 3033	Introduction to Probability and Statistics for CS	3
EGN 3321	Dynamics	3
EGM 3520	Engineering Mechanics of Materials	3
EGM 3520L	Engineering Mechanics of Material Lab	1
ENC 3211	Technical Writing	3

Sixth Semester: (14)

CWR 3201	Fluid Mechanics	3
CWR 3201L	Fluid Mechanics Lab	1
CES 3100	Determinate Structural Analysis	3
ENV 3001	Introduction to Environmental Engineering	3
ENV 3001L	Environmental Engineering Lab	1
EIN 3354	Engineering Economy	3

Seventh Semester: (16)

CES 4605	Steel Design	3
CEG 4011	Geotechnical Engineering I	3
CEG 4011L	Soil Testing Laboratory	1
TTE 4201	Transportation & Traffic Engineering	3
CE Elective		3
CE Elective		3

Eighth Semester: (15)

CWR 3101	Water Resources	3
CES 4702	Reinforced Concrete Design	3
CGN 4802	Civil Engineering Senior Design Project	3
CE Elective		3
CE Elective		3

Student are reuqired to either complete the FE Review course or pass the FE exam

Suggested Electives *(other electives may be chosen, as approved by Department Advisor):*

CES 4101	Intermediate Structural Analysis	3
CEG 4012	Geotechnical Engineering II	4
CCE 4001	Heavy Construction	3
CGN 4321	GIS Application in Civil Engineering and Environmental Engineering	3
TTE 4804	Geometric Design of Highways	3

Electives for Environmental Engineering Option

ENV 4101	Elements of Atmospheric Pollution	3
ENV 4330	Hazardous Waste Assessment and Remediation	3
ENV 4351	Solid Waste Management	3
ENV 4401	Water Supply Engineering	4
ENV 4551	Sewerage and Wastewater Treatment	4
ENV 4560	Reactor Design	3
ENV 4513	Reactions in Environmental Engineering Systems	3

Electives for Construction Engineering Option

CCE 4001	Heavy Contruction	3
CCE 5035	Construction Engineering Management	3
CCE 5505	Computer integrated Construction Engineering	3
CGN 4321	GIS Applications in Civil & Environmental Engineering	3

Note: Required credits towards graduation are 130 credit hours. Due to variation in the number of transfer credit, technical electives may be required.

Course Descriptions

Definition of Prefixes

CCE-Civil Construction Engineering; CEG-Engineering, General; CES-Civil Engineering Structures; CGN-Civil Engineering; CWR-Civil Water Resources; EGM-Engineering, Mechanics; EGN-Engineering, General; ENV-Engineering, Environmental; SUR-Surveying and Related Areas; TTE-Transportation and Traffic Engineering

CCE 4001 Heavy Construction (3). Contractor's organization, contracts, services, safety, planning and scheduling. Equipment and their economics. Special project applications, coffer-dams, dewatering, river diversions, tunnelling. Prerequisite: CES 3100. (F)

CCE 5035 Construction Engineering Management (3). Course will cover construction organization, planning and implementation; impact and feasibility studies; contractual subjects; liability and performance; the responsibility of owner, contractor and engineer. Prerequisite: Permission of the instructor.

CCE 5055 Computer Intergrated Construction Engineering (3). Course covers the discussion of available software related to construction engineering topics; knowledge based expert systems and their relevance to construction engineering planning and management. Prerequisite: Permission of the instructor.

CEG 4011 Geotechnical Engineering I (3). Engineering geology, soil properties; stresses in soils; failures; criterias; consolidation and settlement; compaction, soil improvement and slope stabilization. Prerequisite: CWR 3201 and L, EGM 3520, and L, CHM 1046 and PHY 2049. (F,SS)

CEG 4011L Soil Testing Laboratory (1). Laboratory experiments to identify and test behavior of soils and rocks. Prerequisite: CWR 3201, CWR 3201L, EGM 3520L, EGM 3520. Corequisites: CEG 4011. (Lab fees assessed). (F,SS)

CEG 4012 Geotechnical Engineering II (4). Principles of foundation analysis and design: site improvement for bearing and settlement, spread footings, mat foundations, retaining walls, cofferdams, piles, shafts, caissons, tunnels, and vibration control. Computer applications. Prerequisite: CES 4702, CEG 4011 and L. (S)

CES 3100 Determinate Structural Analysis (3). To introduce the student to the basic concepts and principles of structural theory relating to statically determinate beams, arches, trusses and rigid frames, including deflection techniques. Prerequisite: EGM 3520 with a grade of "C" or better. (F,S,SS)

CES 4101 Indeterminate Structural Analysis (3). To introduce the student to the basic concepts and principles of structural theory relating to statically indeterminate beams, trusses and rigid frames; including Slope Deflection, Moment Distribution, and Matrix Methods. Prerequisite: CES 3100 with a grade of 'C' or better. (S)

CES 4605 Steel Design (3). The analysis and design of structural elements and connections for buildings, bridges, and specialized structures utilizing structural steel. Both elastic and plastic designs are considered. Prerequisite: CES 3100. (F,S,SS)

CES 4702 Reinforced Concrete Design (3). The analysis and design of reinforced concrete beams, columns, slabs, retaining walls and footings; with emphasis corresponding to present ACI Building Code. Introduction to prestressed concrete is given. Prerequisite: CES 3100 with a grade of 'C' or better. (F,S,SS)

CGN 2420 Computer Tools for Civil Engineers (3). Introduction to common civil engineering software such as CAD, COGO, project bidding programs, GIS, and others. Prerequisite: Presmission of the undergraduate advisor.

CGN 3949 Co-Op Work Experience (1-3). Supervised full-time work experience in engineering field. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.

CGN 4321 GIS Applications in Civil and Environmental Engineering (3). Introduction to the basics of geographic information systems, their software and hardware, and their applications in civil and environmental engineering, landscape architecture, and other related fields. Prerequisites: CGS 2420 or CGS 2423, SUR 3101C and consent of instructor. (F)

CGN 4802 Civil Engineering Senior Design Project (3). Compulsory course for all senior students, to experience the design of a practical project by utilizing knowledge learned from previous courses for presenting a solution. Done under the supervision of a faculty member and professional engineer. Prerequisite: EGN 1110C or demonstrate CAD proficiency. (F,S,SS)

CGN 4930 Special Topics in Civil Engineering (1-4). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

CGN 4949 Co-Op Work Experience (1-3). Supervised full-time work experience in engineering field. Limited to students admitted to the co-op program with consent of advisor. Evaluation and report required.

CGN 4980 Civil Engineering Seminar (1). Basic principles and applications of civil engineering, including structural, transportation, environmental, geotechnical, construction, and water resources engineering for civil engineering students. Prerequisite: Permission from undergraduate advisor.

CWR 3103 Water Resources Engineering (3). Hydrology, probability, ground and surface water studies. Closed conduit flow and hydraulic machinery. Prerequisites: CWR 3201 and STA 3033. (F,S)

CWR 3201 Fluid Mechanics (3). A study of the properties of fluids and their behavior at rest and in motion. Continuity, momentum, and energy principles of fluid flow. Prerequisite: EGN 3321. Corequisite: CWR 3201L (F,S)

CWR 3201L Fluid Mechanics Laboratory (1). Application of fluid mechanics principles in the laboratory. Experiments in surface water, groundwater and pipe flow. Corequisite: CWR 3201. (Lab fees assessed). (F,S)

EGM 3520 Engineering Mechanics of Materials (3). Analysis of axial, torsional, bending, combined stresses, and strains. Plotting of shear, moment and deflection diagram with calculus applications and interpretations. Prerequisites: MAC 2313, MAP 2302 and EGN 3311 with a grade of 'C' or better. (F,S,SS)

EGM 3520L Materials Testing Laboratory (1). Introduction to measurements of basic mechanical properties of materials. Experiments include axial tension, compression, torsion, flexure, and the response of simple structural elements. Prerequisites or Corequisites: EGM 3520, MAC 2312 and EGN 3311. (Lab fees assessed). (F,S)

EGN 1110C Engineering Drawing (3). Introduction to elementary design concepts in engineering, principles of drawing, descriptive geometry, pictorials and perspectives and their computer graphics counterpart. (F,S,SS)

EGN 2030 Ethics and Legal Aspects in Engineering (3). Codes of ethics, professional responsibilities and rights, law and engineering, contracts, torts, evidence. (F,S,SS)

EGN 3311 Statics (3). Forces on particles, equilibrium of forces, moments, couples, centroids, section properties, and load analysis of structures. Prerequisites: MAC 2312 and PHY 2048. (F,S,SS)

ENV 3001 Introduction to Environmental Engineering (3). Introduction to environmental engineering problems; water and wastewater treatment, air pollution, noise, solid and hazardous wastes. Prerequisites: CHM 1046 and L, PHY 2049, MAC 2312 and permission of undergraduate advisor. Corequisite: ENV 3001L. (F,S)

ENV 3001L Environmental Laboratory (1). A corequisite to ENV 3001. Practical applications of the theory learned in the course and experience in detecting and measuring some environmental problems. Prerequisites: CHM 1046 and CHM 1046L, PHY 2049, MAC 2312 and permission of undergraduate advisor. Corequisite: ENV 3001. (Lab fees assessed). (F,S)

ENV 3949 Co-Op Work Experience (3). Supervised full-time work experience in engineering field. Limited to students admitted to the co-op program with consent of advisor.

ENV 4024 Bioremediation Engineering (3). Biotransformation of subsurface contaminants in gaining recognition as a viable treatment tool. This course provides students with quantitative methods required to design bioremediation systems. Prerequisite: Permission of the instructor.

ENV 4101 Elements of Atmospheric Pollution (3). The air pollution problem, causes, sources, and effects. Historical development. Physical, political, and economic factors in its control. Prerequisites: CWR 3201 and CWR 3201L or EML 3126 and 3126L, ENV 3001 and ENV 3001L.

ENV 4330 Hazardous Waste Assessment and Remediation (3). Generation, transport, treatment and disposal of hazardous waste; risk assessment and treatment of contaminated media. Prerequisite: One year of General Chemistry.

ENV 4351 Solid Waste Management (3). Sources, amounts and characteristics of solid wastes; municipal collection systems; method of disposal; energetic consideration in the recovery and recycle of wastes. Prerequisites: PHY 2049, and CHM 1046 and CHM 1046L.

ENV 4401 Water Supply Engineering (3). Quantity, quality, treatment, and distribution of drinking water. Prerequisites: CWR 3201 and CWR 3201L, ENV 3001 and ENV 3001L. Corequisite: ENV 4401L.

ENV 4401L Water Laboratory (1). Laboratory exercises in the physical, chemical, and bacteriological quality of potable water. Prerequisites: CWR 3201, ENV 3001 and ENV 3001L. Corequisite: ENV 4401. (Lab fees assessed).

ENV 4513 Reactions in Environmental Engineering Systems (3). A practical basis for applying microbial and physicochemical principles to understand reactions occurring in natural and engineered systems including water/wastewater treatment processes. Prerequisite: Permission of the instructor.

ENV 4551 Sewerage and Wastewater Treatment (3). Collection and transportation of wastewater, design of sanitary and storm sewers. Physical, chemical, and biological principles of wastewater treatment. Prerequisite: CWR 3201 and CWR 3201L, ENV 3001 and ENV 3001L. Corequisite: 4551L.

ENV 4551L Wastewater Laboratory (1). Laboratory exercises in the physical, chemical, and bacteriological quality of raw and treated wastewaters. Prerequisites: CWR 3201 and CRW 3201L, ENV 3001 and ENV 3001L, Corequisite: ENV 4551. (Lab fees assessed).

ENV 4560 Reactor Design (3). A theorectical and practical basis for reaction kinetics to understand multiphase reactions, analysis and design of batch and continuous flow reactors.

ENV 4930 Special Topics in Environmental Engineering (1-4). A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

ENV 4949 Co-Op Work Experience (3). Supervised full-time work experience in engineering field. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.

SUR 2101C Surveying (3). Computations and field procedures associated with the measurement of distances and angles using tape, level, transit, EDMs, and total station. Laboratory is included with field measurements. Prerequisite: EGN 1110C. (F,S)

TTE 4201 Transportation and Traffic Engineering (3). Transportation characteristics; transportation planning, traffic control devices, intersection design, network design, research. Prerequisites: STA 3033 and SUR 3101C. (F,S,SS)

TTE 4804 Geometric Design of Highways (3). Parameters governing geometric design of highways; curve superelevation, widening of highway curves, intersection design; highway interchanges, use of AASHTO design guidelines. Prerequisite: TTE 4201.

TTE 4930C Transportation Seminar (1-3). Oral presentations made by students, guests, and faculty members on current topics and research activities in traffic and transportation engineering. Prerequisite: TTE 4201.

Electrical and Computer Engineering

Malek Adjouadi, *Associate Professor and Acting Chairperson*
Jean Andrian, *Associate Professor*
Tadeusz Babij, *Professor*
Armando Barreto, *Assistant Professor*
Manuel Cereijo, *Professor*
Thomas Gilbar, *Instructor and Advisor*
Mark Hagmann, *Associate Professor*
Malcolm Heimer, *Associate Professor*
W. Kinzy Jones, *Professor*
Grover Larkins, *Associate Professor*
Osama Mohammed, *Professor*
Sylvia Mergui, *Assistant Professor*
Gustavo Roig, *Associate Dean, and Associate Professor*
Pierre Schmidt, *Professor*
James Story, *Professor and Associate Dean*
Subbarao Wunnava, *Professor and Associate Chairperson*
Frank Urban, *Associate Professor*
Carolyne Van Vliet, *Professor*
Kang Yen, *Professor*

Bachelor of Science in Electrical Engineering

Common Prerequisites

CHM	General Chemistry I
CHM	General Chemistry Lab I
MAC 2311	Calculus I
MAC 2312	Calculus II
MAC 2313	Multivariable Calculus
MAP 2302	Differential Equations
PHY	Physics with Calculus
PHY	Physics with Calculus II
PHY	General Physics Lab II

Degree Program Hours: 128

The Electrical Engineering curriculum provides an emphasis toward engineering concepts and design in the varied and rapidly expanding fields of electrical engineering. Students applying to Electrical Engineering should have good communication skills in English (verbal and written) and exhibit logical thinking, creativity, imagination, and persistence. They should have proven academic excellence in mathematics, chemistry, and physics.

At the undergraduate level, the basic required program of instruction in fundamental theory and laboratory practice is balanced by a broad range of electives in such fields as computers, communication systems, control systems, power systems, and integrated electronics. Students, with the counsel and guidance of faculty advisers, design their electives program around their own special interest.

Any course taken without the required prerequisites and corequisites will be dropped automatically before the end of the term, resulting in a grade of 'DR' or 'DF'.

Students must earn a minimum grade of 'C-' and a minimum GPA of 2.0 in all EEL courses required for graduation.

Students who have been dismissed for the first time from the University due to low grades, may appeal to the department for reinstatement. A second dismissal results in no possibility of reinstatement.

Lower Division Preparation

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. For transfer applicants, at least 60 hours in pre-engineering credits must be earned, including C programming language, Calculus I & II, Chemistry I and Lab, Physics with Calculus I & II and labs, Statics, English Composition I & II, a minimum of 16 credit hours worth of social science (preferably Economics) and humanities with at least two of the courses being in the same discipline, two Gordon Rule courses, and Engineering Graphics or CAD (unless previously taken in high school). A minimum grade of 'C' is required in all calculus, physics, chemistry, and differential equations courses. See the example semester-by-semester program on the following pages.

Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog's General Information.

Upper Division Course Objectives

The courses listed as requirements for a BS degree not only supply the students with mathematical and scientific knowledge, but also supply other essentials for a successful engineering career. Therefore, our courses have been designed to increase student competence in written and oral communication skills as well as supply an understanding of social, ethical, economic, and safety considerations for engineers. Furthermore, course projects will be designed to supply appropriate computer-based experience with software tools as well as basic programming skills in order for the students to utilize computers for circuit analysis, mathematical calculations, and other engineering applications.

Upper Division Program

The program includes Dynamics, Multivariable Calculus, Materials of Engineering, Signals and Systems, Differential Equations, and the following:

Electrical Engineering Curriculum (Major only): (53)

EEL 3111	Circuits I	3
EEL 3111L	Circuits I Lab	1
EEL 3112	Circuits II	3
EEL 3303	Electronics I	3
EEL 3303L	Electronics I Lab	1
EEL 3396	Introduction to Solid State	3
EEL 3514	Communication Systems	3
EEL 3657	Control Systems	3
EEL 3712	Logic Design I	3
EEL 3712L	Logic Design I Lab	1
EEL 4010	Senior Design I: Ethics, Communications, and Constraints	2
EEL 4011	Senior Design II: Project Implementation	2
EEL 4304	Electronics II	3
EEL 4304L	Electronics II Lab	1
EEL 4213	Power Systems I	3
EEL 4213L	Energy Conversion Lab	1
EEL 4314	Integrated Circuits and Systems	3
EEL 4314L	Integrated Circuits and Systems Lab	1
EEL 4410	Introduction to Fields and Waves	3
EEL 4611L	Systems Lab	1
EEL 4709C	Computer Design	3
	Electrical Engineering Electives *(two courses)*	6

Electrical Engineering Program Freshman to Senior

First Semester: (14)

MAC 2311	Calculus I	4
CHM	General Chemistry I	3
CHM	General Chemistry Lab I	1
ENC 1101	Freshmen Composition	3
SLS 1501	Freshman Experience	1
EGN 1002	Engineering Orientation	2

Second Semester: (17)

MAC 2312	Calculus II	4
ENC 1102	Literary Analysis	3
CGS 2423	C for Engineers	3
PHY 2048	Physics I	3
Tech Elective		4

Third Semester: (10-13)

MAC 2313	Multivariable Calculus	4
EGN 3365	Materials of Engineering	3
ECO 2013	Principles of Macroeconomics	3

Note: If not previously taken in high school:

EGN 1110C	Engineering Drawing	3

Fourth Semester: (13)

PHY 2049	Physics II	3
PHY 2049L	Physics II Lab	1
Literature/Art/Drama/Music/ Foreign Language		3
MAP 2302	Differential Equations	3
PHI 2011	Philosophical Analysis	3
	or	
REL 2011	Religion Analysis	3
	or	
ENG 2012	Approaches to Literature	3
	or	
SSI 3240	World Prospects and Issues	3

Fifth Semester: (16)

History writing course		3
Comp. Cultures (same topic as Social Science)		3
EEL 3111	Circuit I	3
EEL 3111L	Circuit I Lab	1
EEL 3135	Signals & Systems	3
EGN 3311	Statics	3

Sixth Semester: (16)

EIN 3354	Engineering Economy	3
EEL 3112	Circuits II	3
EEL 3514	Communication Systems	3
EEL 3712	Logic Design I	3
EEL 3712L	Logic Design I Lab	1
EEL 4410	Introduction to Field and Waves	3

Seventh Semester: (14)

EEL 3303	Electronics I	3
EEL 3303L	Electronics I Lab	1
EEL 3657	Control Systems I	3
EEL 4213	Power Systems I	3
EEL 4213L	Energy Conversion Lab	1
EEL 4709C	Computer Design	3

Eighth Semester: (13)

EEL 4304	Electronics II	3
EEL 4304L	Electronics II Lab	1
EE Elective		3
EEL 4010	Senior Design Part I: Ethics, Comm, and Constraints	2
Adv. Humanities/Social Science		3
EEL 4611L	Systems Laboratory	1

Ninth Semester: (15)

EE Elective (same area)		3
EEL 4011	Senior Design II: Project Implementation	2
EGN 3321	Dynamics	3
EEL 4314	Integrated Circuits	3
EEL 4314L	Integrated Circuits Lab	1
EEL 3396	Intro to Solid State	3

Bachelor of Science in Computer Engineering

Common Prerequisites

CGS 2423	'C' for Engineers
	or
COP 2210	Introduction to Programming
CHM	General Chemistry I
CHM	General Chemistry Lab I
MAC 2311	Calculus I
MAC 2312	Calculus II
PHY	Physics with Calculus
PHY	Physics with Calculus II
PHY	General Physics Lab II

Degree Program Hours: 128

The curriculum structure provides an in depth study of the major areas of computer engineering by providing a strong mathematical foundation, a balanced view of hardware and software design and application techniques. The goals and objectives of the program are to train students in the skills of the electrical engineer specialized in the design and application of both computer hardware and software.

Any course taken without the required prerequisites and corequisites will be automatically dropped before the end of the term, resulting in a grade of 'DR' or 'DF'.

Students must earn a minimum grade of 'C' in all calculus, physics, chemistry and differential equations and a 'C-' in Discrete Math, Numerical Analysis, all CIS, CEN, COP, and EEL courses required for graduation. Also, a student must have a minimum GPA of 2.0 in all EEL courses.

Students who have been dismissed for the first time from the University due to low grades, may appeal to the department for reinstatement. A second dismissal results in no possibility of reinstatement.

The lower division preparation for transfer students seeking a degree in computer engineering is the same as for those pursuing a degree in electrical engineering except for multivariable calculus. Knowledge of 'C' is required as a prerequisite for the computer software curriculum and Discrete Math.

Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog's General Information.

Upper Division Course Objectives

The courses listed as requirements for a BS degree not only supply the students with mathematical and scientific knowledge, but also supply other essentials for a successful engineering career. Therefore, our courses have been designed to increase student competence in written and oral communication skills as well as supply an understanding of social, ethical, economic, and safety considerations for engineers. Furthermore, course projects will be designed to supply appropriate computer-based experience with software tools as well as basic programming skills in order for the students to utilize computers for circuit analysis, mathematical calculations, and other engineering applications.

Upper Division Program

The upper division program includes Numerical Analysis, Discrete Math, Differential Equations, Signals and Systems, and the following:

Computer Software Curriculum: (19)

CEN 4010	Introduction to Software Engineering	4
COP 3337	Intermediate Programming	3
COP 3338	Advanced Programming	3
COP 3530	Data Structures	3
COP 4610	Operating Systems Principles	3
COP 4225	Advanced Unix Programming	3
	or	
COP 4226	Advanced Windows Programming	3

Electrical Engineering Curriculum: (26)

EEL 3111	Circuits I	3
EEL 3111L	Circuits I Lab	1
EEL 3112	Circuits II	3
EEL 3303	Electronics I	3
EEL 3303L	Electronics I Lab	1
EEL 3514	Communication Systems	3
EEL 3657	Control Systems	3
EEL 4304	Electronics II	3
EEL 4304L	Electronics II Lab	1
EEL 4314	Integrated Circuits	3
EEL 4314L	Integrated Circuits Lab	1
EEL 4611L	Systems Lab	1

Computer Hardware Curriculum: (8)

EEL 3712	Logic Design I	3
EEL 3712L	Logic Design Lab	1
EEL 4010	Senior Design I: Ethics, Communications and Constraints	2

EEL 4011	Senior Design II: Project Implementation	2
EEL 4709C	Computer Design	3
EEL 4746	Microcomputers	3
EEL 4746L	Microcomputers Lab	1

Computer Engineering Program

Freshman to Senior

First Semester: (15)

MAC 2311	Calculus I	4
CHM	General Chemistry I	4
CHM	Gen. Chemistry Lab I	1
ENC 1101	Freshman Composition	3
SLS 1501	Freshman Experience	1
EGN 1002	Engineering Orientation	2

Second Semester: (13)

MAC 2312	Calculus II	4
ENC 1102	Literary Analysis	3
COP 3337	Intermediate Programming	3
PHY 2048	Physics I	3

Third Semester: (9-12)

MAD 2104	Discrete Math	3
COP 3338	Advanced Programming	3
ECO 2013	Principles of Macroeconomics	3

Note: If not previously taken in high school:

EGS 1110	Engineering Drawing	3

Fourth Semester: (16)

PHY	Physics with Calculus II	3
PHY	General Physics Lab II	1
Literature/Art/Drama/Music/Foreign Language		3
MAP 2302	Differential Equations	3
PHI 2011	Philosophical Analysis	3
	or	
REL 2011	Religion Analysis	3
	or	
ENG 2012	Approaches to Literature	3
	or	
SSI 3240	World Prospects and Issues	3
Tech Elective		3

Fifth Semester: (16)

History writing course		3
Comp. Cultures (same as Social Science)		3
EEL 3135	Signals and Systems	3
EEL 3111	Circuits I	3
EEL 3111L	Circuits I Lab	1
EGN 3311	Statics	3

Sixth Semester: (16)

EIN 3354	Engineering Economy	3
EEL 3112	Circuits II	3
EEL 3514	Communications	3
EEL 3712	Logic Design I	3
EEL 3712L	Logic Design Lab I	1
COP 3530	Data Structures	3

Seventh Semester: (16)

EEL 3303	Electronics I	3
EEL 3303L	Electronics I Lab	1
COP 4610	Operating Systems	3
MAD 3401	Numerical Analysis	3
EEL 3657	Control Systems	3
EEL 4709	Computer Design	3

Eighth Semester: (14)

EEL 4304	Electronics II	3
EEL 4304L	Electronics II Lab	1
EEL 4746	Microcomputer I	3
EEL 4746L	Microcomputers I Lab	1
EEL 4010	Senior Design I: Ethics, Communications, and Constraints	2
CEN 4010	Intro to Software Engineering	4

Ninth Semester: (13)

Computer Engineering Elective		3
EEL 4611L	Systems Lab	1
EEL 4011	Senior Design II: Project Implementation	2
COP 4225	Advanced UNIX Prgramming	3
	or	
COP 4226	Advanced Windows Programming	3
EEL 4314	Integrated Circuits	3
EEL 4314L	Integrated Circuits Lab	1

Course Descriptions

Definition of Prefixes

EEL - Engineering: Electrical
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

CDA 4400 Computer Hardware Analysis (3). The study of hardware functions of a basic computer. Topics include logic elements, arithmetic logic units, control units, memory devices, organization and I/O devices (for non-EE majors only). Prerequisites: CDA 4101 and MAD 2104.

EEL 3003 Electrical Engineering I (3). For non-EE majors. Basic principles of DC and AC circuit analysis, electronic devices and amplifiers, digital circuits, and power systems. Prerequisite: MAC 2312. Corequisite: MAP 2302. (F,S,SS)

EEL 3111 Circuits I (3). Introductory electronics course dealing with DC, AC and transient electrical circuit analysis, involving passive elements such as resistors, capacitors, inductors, transformers, etc. Prerequisites: MAC 2312 and PHY 2049. Corequisites: MAP 2302, C, and EEL 3111L. (F,S)

EEL 3111L Circuits Lab (1). This lab introduces basic test equipment; oscilloscopes, multimeters, power supply, function generator, etc., and uses this equipment in various experiments on resistors, capacitors, and inductors. Prerequisite: EEL 3049L. Corequisite: EEL 3111. (F,S)

EEL 3112 Circuits II (3). Application of operational methods to the solution of electrical circuit effect of poles and zeroes on the response and transfer function of electrical networks. Laplace and Fourier transforms; network parameters. Prerequisites: EEL 3111, MAP 2302, EEL 3135, C Language. (S,SS)

EEL 3135 Signals and Systems (3). Use of Fourier analysis in electrical and electronic systems. Introduction to probability theory, linear algebra and complex variables. Prerequisites: MAP 2302. (F,S)

EEL 3160 Computer Applications in Electrical Engineering (3). Interactive techniques of computers to simulate and design electrical engineering circuits and systems. Prerequisites: Permission of the instructor and C. (S)

EEL 3303 Electronics I (3). Introductory electronics course dealing with the properties of basic electronic devices such as diodes, transistors, Fets, SCRs, etc., and their circuit applications. Prerequisites: EEL 3111 and C. Corequisites: EEL 3303L. (F,SS)

EEL 3303L Electronics I Laboratory (1). Designing, building, and testing electronic circuits which use diodes, transistors and field effect transistors. Prerequisite: EEL 3111L. Corequisite: EEL 3303. (F,SS)

EEL 3396 Introduction to Solid State Devices (3). Introduction to the physics of semiconductors; charge carrier statistics and charge transport in crystalline solids. Basic operations of solid state devices including p-n junction diode, and the bipolar junction transistor. Prerequisite: MAP 2302. Corequisite: EEL 3111. (F,S)

EEL 3514 Communication Systems (3). An introductory course in the field of analog communication systems. Transmitters, receivers, and different modulation and demodulation techniques are studied. A basic treatment of noise is also included. Prerequisite: EEL 3135. Corequisite: EEL 3112. (F,S)

EEL 3657 Control Systems I (3). Analysis of linear time-invariant feedback control systems. System modeling, time and frequency-domain response, stability and accuracy. Analysis by use of Root- Locus, Bode plots, Nyquist diagram. Prerequisite: EEL 3112. (F,SS)

EEL 3712 Logic Design I (3). Boolean Algebra. Binary number systems. Combinational logic design using SSI, MSI and LSI. Sequential logic design. Corequisite: EEL 3712L, EEL 3111. (S,SS)

EEL 3712L Logic Design I Lab (1). Laboratory experiments, including gates, combinational networks, SSI, MSI, LSI, and sequential logic design. Corequisite: EEL 3111 and EEL3712. (S,SS)

EEL 4010 Senior Design I: Ethics, Communications, and Constraints (2). Capstone part I: Professional ethics, oral communications, project feasibility study, proposal writing, system design methodology, human factors, intellectual property, liability and schedules. Prerequisite: Senior standing.

EEL 4011 Senior Design II: Project Implementation (2). Design of a complete EE system including use of design methodology, formulation, specifications, alternative solutions, feasibility, economic, reliability, safety ethics, and social impact. Prerequisites: EEL 4010. (S,F,SS)

EEL 4015 Electrical Design in Buildings I (3). Application of electrical codes and regulations. Design of loads, circuits, surge protectors, feeders, panels, and breakers. Prerequisites: EEL 3111 and EEL 3111L. (F)

EEL 4016 Electrical Design in Buildings II (3). Electrical design of industrial buildings, size and design of distribution rooms, switchboards, transformers, bus ducts, motor control centers, starters, voltage drop calculations, lighting distribution. Prerequisite: EEL 4015. (S)

EEL 4140 Filter Design (3). Approximation techniques. Active RC second order modules. Low pass filters, bandpass filters, high pass filters, notch filters are studied in detail. Sensitivity and high order filters. Design and laboratory implementation. Prerequisites: EEL 3657, EEL 4304, or permission of the instructor. (F)

EEL 4213 Power System I (3). Introductory course to power systems components; transformer, induction machines, synchronous machines, direct current machines, and special machines. Prerequisite: EEL 4410. Corequisites: EEL 3112 and EEL 4213L. (F,SS)

EEL 4213L Energy Conversion Lab (1). Operation, testing, and applications of energy conversion machines including AC and DC motors and generators. Starts with experiments on magnetic circuits and transformers. Prerequisite: EEL 4410. Corequisite: EEL 4213. (F,SS)

EEL 4214 Power Systems II (3). Transmission line models, the bus admittance matrix, load flow studies and solution techniques, economic dispatch with and without losses, computer applications. Prerequisite: EEL 4213. (F)

EEL 4215 Power Systems III (3). Short circuit calculations, symmetrical and unsymmetrical fault analysis, transient stability and dynamic studies as well as power system control. Computer applications. Prerequisite: EEL 4214. (S)

EEL 4216 Power Electronics (3). Power semiconductor devices, power supplies, DC choppers, AC voltage controller, power inverter, AC and DC drives. Prerequisites: EEL 4213 and EEL 4304.

EEL 4304 Electronics II (3). Second course in electronics with particular emphasis on equivalent circuit representation and analysis of electronic analog and switching circuits and systems, their frequency response and behavior under feedback control. Prerequisites: EEL 3112 and EEL 3303. Corequisite: EEL 4304L. (F,S)

EEL 4304L Electronics II Laboratory (1). Design and measurement experiments of advanced electronics, including applications of integrated circuits. Prerequisite: EEL 3303L. Corequisite: EEL 4304. (F,S)

EEL 4306 Electrical Engineering II (3). Electronic circuits. Transistors, FET. Equivalent circuits. Operational amplifiers. Basic digital circuits. Energy conversions. Transformers. Machinery. For non-EE majors only. Prerequisite: EEL 3003.

EEL 4314 Integrated Circuits and Systems (3). Continuation of Electronics II with major emphasis on design and applications of integrated circuits. Includes design of analog, control, communication and digital oriented electronic systems. Prerequisite: EEL 4304. Corequisite: EEL 4314L. (F,S,SS)

EEL 4314L Integrated Circuits Laboratory (1). Laboratory experiments in integrated circuits. Includes design of filters, analog systems, A/D and D/A systems. Prerequisite: EEL 4304L. Corequisite: EEL 4314. (F,S,SS)

EEL 4410 Introduction to Fields and Waves (3). Static electric field, the steady electric current, magnetic field of ferro magnetic materials. The relation between field and circuit theory waves and wave polarization, reflection, refraction, and diffraction. Prerequisite: EEL 3111. (F,S,SS)

EEL 4461C Antennas (3). Introduction to linear antennas, linear arrays and aperture antennas. Far field pattern calculation and measurement techniques. Prerequisite: EEL 3514 or permission of the instructor. (S)

EEL 4510 Introduction to Digital Signal Processing (3). Z transform. Continuous and digital filters. Design of digital filters. Effects of finite register length in digital filters. Engineering applications of digital filters. Prerequisite: EEL 3514 or permission of the instructor. (S)

EEL 4515 Advanced Communication Systems (3). Advanced senior level course designed for those students who desire to enhance their engineering knowledge in communication systems. State-of-the-art techniques in FM, digital communication, phase locked loops, noise treatment, threshold improvement, etc. Prerequisites: EEL 3514, EEL 4304 or permission of the instructor. (SS)

EEL 4611 Control Systems II (3). Design by Root-Locus, Bode plot, and Buillin-Truxal approach; characteristics of some typical industrial controllers and sensors. Computer simulation and other modern topics are included. Prerequisite: EEL 3657 or permission of the instructor. (S)

EEL 4611L Systems Laboratory (1). Laboratory experiments in various systems. Includes position and velocity control systems, zeroth order, first order, and second order systems. Communication Systems. Corequisites: EEL 3657 and EEL 3514. (S,F)

EEL 4709C Computer Design (3). Computer architecture, arithmetic units, RAM, ROM, tape, disk, CPU, memory systems, data, input/output devices. Distributed and centralized control. Prerequisites: EEL 3712 and EEL 3712L. (F,SS)

EEL 4713 Digital Logic Design II (3). Upper division course in system design using state-of-the-art digital integrated circuits and concepts leading to realization of practical digital electronic systems. Prerequisite: EEL 4746 or permission of the instructor. (S)

EEL 4746 Microcomputers I (3). RAM, ROM, and CPU architecture. Instruction set. Timing sequences. Subroutines. Interrupts. Peripherals. Applications. System design. Prerequisite: EEL 4709C or permission of the instructor. Corequisite: EEL 4746L. (F)

EEL 4746L Microcomputers I Laboratory (1). Hands-on design experience with microcomputer systems and applications including buses, interfaces, and in-circuit emulation. Prerequisite: EEL 4709C. Corequisite: EEL 4746. (F)

EEL 4747 Microcomputers II (3). Design of interfacing schemes of microcomputers such as video, disk, etc., and state-of-the-art hardware and software features of advanced microprocessors' families. Prerequisite: EEL 4709C or permission of the instructor.

EEL 4798 Special Topics in Computer Engineering (1-3). Special topics in computer engineering not covered in other courses. Prerequisite: Permission of the instructor.

EEL 4905 Individual Problems in Electrical Engineering (1-3). Selected problems or projects in the student's major field of electrical engineering. It can be extended to a maximum of six hours. Student works independently with a minor advisement from designated faculty member. Prerequisites: Senior level and permission of the instructor.

EEL 4930 Special Topics in Electrical Engineering (1-3). Special topics in electrical engineering not covered in other courses. Prerequisite: Permission of the instructor.

EEL 4949 Co-Op Work Experience (3). Practical co-op engineering work under approved industrial supervision. Prerequisite: EEL 3949. (F,S,SS)

EGN 1002 Engineering Orientation (2). Introduction to aspects of the engineering profession. Computer tools and basic engineering science. Team-based engineering projects. (F,S)

ELR 4202C Medical Instrumentation Design (4). Concepts of transducers and instrumentation systems; origins of biopotentials; electrical safety; therapeutic and prosthetic devices. Prerequisite: EEL 4304 or permission of the instructor. (SS)

Industrial and Systems Engineering

Shih-Ming Lee, *Associate Professor, Chairperson*
Martha Centeno, *Associate Professor*
Chin-Sheng Chen, *Professor*
Joe Chow, *Associate Professor*
Ronald Giachetti, *Assistant Professor*
Julie Jacko, *Assistant Professor*
Khokiat Kengskool, *Associate Professor*
Sergio Martinez, *Instructor*
Marc Resnick, *Associate Professor*
Mario Sanchez, *Instructor and Advisor*

Bachelor of Science in Industrial Engineering

Degree Program Hours: 127

As defined by the Institute of Industrial Engineers, Industrial Engineering is concerned with the design, improvement and installation of integrated systems of people, materials, information, equipment and energy. A major distinction between industrial engineering and other branches of engineering is that the industrial engineer must consider not only the behavior of inanimate objects as they are governed by physical laws but also the behavior of people as they operate together in organizations, and as such it is often called the people oriented engineering discipline.

The program emphasizes areas of simulation and modeling, manufacturing systems, human factors/ ergonomics, and engineering management. It is also soundly based in the traditional industrial engineering areas such as work measurement and simplification, probability and statistics, and facility and work place design.

Bachelor of Science in Industrial and Systems Engineering

Common Prerequisites

CHM	General Chemistry I	
CHM	General Chemistry Lab I	
EIN 3235	Evaluation of Engineering Data	
MAC 2311	Calculus I	
MAC 2312	Calculus II	
MAP 2302	Differential Equations	
PHY	Physics with Calculus I	
PHY	General Physics Lab I	
PHY	Physics with Calculus II	
PHY	General Physics Lab II	

Lower Division Preparation

Students entering FIU with fewer than 36 transfer hours must satisfy all FIU Core Curriculum Requirements while students transferring to FIU with at least 46 hours must satisfy the General Education Requirements. To qualify for admission to the Industrial Engineering upper division program, students must have passed the CLAST and completed at least 60 semester hours of pre-engineering courses which include Calculus I & II, Differential Equations, Statistics, Chemistry I and Lab, and Physics with Calculus I & II and Labs.

Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog's General Information for Admissions and the Office of the Registrar.

Upper Division Program

The program includes 21 semester hours of General Engineering courses, 44 semester hours of required Industrial Engineering courses, and nine hours of technical electives.

General Engineering: (21)

EEL 3003	Electrical Engineering I	3
EGN 3123	Computer Assisted Drawing	3
EGN 3311	Statics	3
EGN 3321	Dynamics	3
EGN 3343	Thermodynamics I	3
EGN 3365	Materials in Engineering	3
CGS 2423	C for Engineers	3

Industrial Engineering Core Courses: (44)

EIN 3354	Engineering Economy	3
EIN 3365	Facilities Planning	5
EIN 3390	Manufacturing Processes	2
EIN 3390L	Manufacturing Processes Lab	1
EIN 3331	Quality Control	3
EIN 3600	Industrial Automation	2
EIN 3600L	Industrial Automation Lab	1
EIN 4243	Human Factors in Engineering	2
EIN 4243L	Human Factors Lab	1
EIN 4314	Work Design	2
EIN 4314L	Work Design Lab	1
EIN 4334	Production Planning & Control	3
ESI 3161	Industrial Applications of Microprocessors	3
ESI 3314	Generic Models I	3
ESI 4315	Generic Models II	3
ESI 3523	Simulation Models	2
ESI 3523L	Simulation Models Lab	1
ESI 4452	Project Management	3
ESI 4554	ISE Systems Design	3

Industrial Engineering Electives (9)

EIN 3102	Collective Bargaining	3
EIN 4214	Safety in Engineering	3
EIN 3949	Industrial Engineering Co-Op	1-3
EIN 4116	Industrial Information Systems	3
EIN 4122	Industrial Marketing	3
EIN 4261	Industrial Hygiene	3
EIN 4326	Industrial Research and Development	3
EIN 4333	Productivity Planning	3
EIN 4387	Technology Assessment	3
EIN 4389	Technological Forecasting	3
EIN 4391	Concurrent Engineering	3
EIN 4395	Computer Integrated Manufacturing	3
EIN 4933	Special Topics	3
EIN 4949	Co-Op Work Experience	1-3
EIN 5106	Regulatory Aspects of Engineering	3
EIN 5226	Total Quality Management for Engineers	3
EIN 5249	Occupational Biomechanics	3
EIN 5322	Engineering Management	3
EIN 5332	Quality Engineering	3
EIN 5359	Industrial Financial Decisions	3
EIN 5367	Production Systems	3
EIN 5392	Design and Implementation of Discrete Manufacturing Systems	3
EIN 5605	Robotic Assembly Cells	3
ESI 4556	Industrial and Systems Engineering in the Office	3

Industrial and Systems Engineering Program

First Semester: (16)

SLS 1501	Freshman Experience Seminar	1
ENC 1101	Freshman Composition	3
MAC 2311	Calculus I	4
CHM	General Chemistry I	
CHM	General Chemistry I Lab	
Art		3

Second Semester: (16)

ENC 1102	Literary Analysis	3
MAC 2312	Calculus II	4
ECO 2023	Principles of Microeconomics	3
EIN 3235	Evaluation of Engineering Data	3
CGS 2423	C for Engineers	3

Suggested Summer Term: (9)

ECO 2013	Principles of Macroeconomics	3
EGN 3123	Computer Assisted Drawing	3
Critical Inquiry		3

Third Semester: (15)

MAP 2302	Differential Equations	3
PHY	Physics with Calculus I	
PHY	General Physics Lab I	
EIN 3354	Engineering Economy	3
Tech Elective		2
Historical Foundations		3

Fourth Semester: (15)

PHY	Physics with Calculus II	
PHY	Physics with Calculus II Lab	
EGN 3311	Statics	3
EGN 3365	Materials in Engineering	3
ESI 3161	Industrial Applications of Microprocessors	3
Tech Elective		2

Fifth Semester: (15)

EGN 3321	Dynamics	3
EGN 3343	Thermodynamics	3
EIN 3331	Quality Control	3
EIN 4314	Work Design	2
EIN 4314L	Work Design Lab	1
ESI 3314	Generic Models I	3

Sixth Semester: (12)

EIN 3390	Manufacturing Process	2
EIN 3390L	Manufacturing Process Lab	1
EIN 3600	Industrial Automation	2
EIN 3600L	Industrial Automation Lab	1
EIN 4243	Human Factors	2
EIN 4243L	Human Factors Lab	1
ESI 4315	Generic Models II	3

Seventh Semester: (14)

EIN 3365	Facility Planning and Materials Handling	5
EIN 4334	Production Planning and Control	3
ESI 3523	Simulation Models of Industrial System	2
ESI 3523L	Simulation Models Lab	1
ESI 4452	Project Management Systems Design	3

Eighth Semester: (15)

EEL 3003	Electrical Engineering I	3
ESI 4554	ISE Systems Design	3
IE Elective I		3
IE Elective II		3
IE Elective III		3

Course Descriptions

Definition of Prefix

EGN - Engineering General; EIN - Engineering: Industrial; ESI - Engineering Systems Industrial. F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

EGN 3123 Computer Assisted Drawing and Design (3). Application of computer assisted design technology to product design, feasibility study and production drawing. (F,S,SS)

EGN 5435 Product Modeling (3). Life cycle product data, geometry and form features, product information models and modeling techniques, product modeling systems, and product data standards. Prerequisites: EGN 3123 or equivalent.

EIN 1396C Basic Industrial Shop and Manufacturing Practices (3). Fundamentals of basic capabilities and requirements for a modern shop or industrial manufacturing facilities. Rudiments of safety requirements, wood technology, metal technology and plastic technology. (S)

EIN 3102 Collective Bargaining in Industrial Systems (3). A comprehensive study of collective bargaining with emphasis upon the private sector. Included will be negotiations and scope of contracts, day-to-day contract administration, and major bargaining issues. (S)

EIN 3235 Evaluation of Engineering Data (3). Analysis of industrial data and subsequent characterization of industrial processes. Prerequisite: MAC 2312. (F,S,SS)

EIN 3331 Quality Control (3). Modern concepts for managing the quality function of industry to maximize customer satisfaction at minimum quality cost. The economics of quality, process control, organization, quality improvement, and vendor quality. Prerequisite: EIN 3235. (F,S,SS)

EIN 3354 Engineering Economy (3). Basic methods of engineering economic analysis including equivalence, value measurement, interest relationships and decision support theory and techniques as applied to capital projects. (F,S,SS)

EIN 3365 Facilities Planning and Materials Handling (5). Application of methods and work measurement principles to the design of work stations. Integration of work stations with storage and material handling systems to optimize productivity. Prerequisite: EGN 3123 and ESI 3314. (F,S)

EIN 3390 Manufacturing Processes (2). Study of interrelationships among materials, design and processing and their impact on workplace design, productivity and process analysis. Prerequisites: EGN 3365. Corequisite: EIN 3390L. (F,S,SS)

EIN 3390L Manufacturing Processes Laboratory (1). Experiments are conducted using the machines, equipment and tools in the laboratory to provide students with hands-on experience on product design, process planning, fabrication and quality assurance. Corequisite: EIN 3390. (Lab fees assessed). (F,S,SS)

EIN 3600 Industrial Automation (2). Basic concepts of industrial automation and robotics. Performance characteristics, criteria for use, planning, selection, and implementation of computer automated equipment. Open to non-majors. Prerequisite: ESI 3161. Corequisite: EIN 3600L. (F,S)

EIN 3600L Industrial Automation Lab (1). Experiments in the use of CNC machines and robots demonstrating performance characteristics of CNC equipment and robotic arms. Corequisite: EIN 3600. (Lab fees assessed). (F,S)

EIN 3949 Industrial Engineering Co-Op (1-3). Entry level work experience as an Industrial Engineering intern. Jointly supervised by IE and Industry personnel. Written report required. Student must obtain approval from IE faculty and sign up for course before starting work. Prerequisite: Approval of advisor. (F,S,SS)

EIN 4116 Industrial Information Systems (3). The integration of information flows and data bases with the production planning and control systems into productive and manageable systems. Prerequisite: Programming language. (S)

EIN 4122 Industrial Marketing (3). The performance of business activity that directs the flow of goods and services from producer to industrial user. Covers new product development, marketing research, sales engineering, pricing, distribution, and promotion. (F)

EIN 4214 Safety in Engineering (3). Introduces occupational safety and health hazards associated with mechanical systems, materials handling, electrical systems, and chemical processes. Illustrates controls through engineering revision,

safeguarding, and personal protective equipment. Emphasis placed on recognition, evaluation and control of occupational safety and health hazards. Prerequisites: EIN 4314 or permission of the instructor. (F)

EIN 4243 Human Factors Engineering (2). Examination of the ways to fit jobs and objects better to the nature and capacity of the human being. Lectures will review man's performance capability, singly and in groups, in interacting with his work environment. Stresses the practical application of human factors principles. Prerequisite: EIN 4314. Corequisite: EIN 4243L. (F,S)

EIN 4243L Human Factors in Engineering and Design Laboratory (1). Experiments are conducted which measure human factors indicators and differences by age, sex, and race, as well as physiological and anatomical differences. Corequisite: EIN 4243. (Lab fees assessed). (F,S)

EIN 4261 Industrial Hygiene (3). A continuation of Safety in Industry. An introduction to OSHA regulations on health hazards. Noise, radiation, and dust problems in industry. Special hazards with solvents, asbestos, lead, silica, and other chemicals. OSHA compliance procedures. Prerequisite: Junior standing. (S)

EIN 4314 Work Design and Industrial Ergonomics (2). The analysis, design, and maintenance of work methods. Study of time standards, including pre-determined time standards and statistical work sampling. Prerequisite: EGN 3123, EIN 3235 or equivalent. Corequisite: EIN 4314L. (F,S)

EIN 4314L Work Design and Industrial Ergonomics Laboratory (1). Experiments in the different Work Design techniques including Performance Sampling, Time Studies, Pre-Determined Time Systems and Workplace Design. Corequisite: EIN 4314. (Lab fees assessed). (F,S)

EIN 4326 Industrial Research and Development (3). Research and development for new product strategies, technological assessment, patent and product liability, and sales engineering. An independent study product will be required by each student. Prerequisite: Senior status. (S)

EIN 4333 Productivity Planning (3). The improvement of productivity as a functional activity of the enterprise. Productivity definitions, measurement, methodologies, and reporting systems. Prerequisites: EIN 4314, ESI 3161, and statistics. (F)

EIN 4334 Production Planning and Control (3). Production systems, demand forecasting, capacity planning, master production planning, material requirements planning, shop floor control, and assembly line balancing. Prerequisites: EIN 3354 and ESI 3314. (F,S)

EIN 4387 Technology Assessment (3). Development of systematic efforts to anticipate impacts on society that may occur when a technology is introduced, extended, or modified. Prerequisites: Senior standing in Engineering, ESI 3161 and Statistics. (S)

EIN 4389 Technological Forecasting (3). Emphasis on forecasting future trends and specific developments in the area of capabilities and needs. Prerequisites: Senior standing in Engineering, and EIN 4334. (F)

EIN 4391 Concurrent Engineering (3). Overview of product and process design. Principles of design for manufacturing. Manufacturability evaluation methods. Computer aided design for manufacturing techniques and strategies. Prerequisites: EIN 3600 and EIN 3390. (SS)

EIN 4395 Computer Integrated Manufacturing (3). The integration of computer aided design and computer aided manufacturing. Development of a common data base for design and manufacturing. Developments of flexible manufacturing systems. Prerequisites: EIN 3600 and ESI 3523.

EIN 4933 Special Topics in Industrial Engineering (2-3). Permits in-depth study in areas relating to specific student interests, recent advances, and problems in industrial technology or systems. Prerequisite: Senior standing, consent of faculty advisor and approval of department chairman. (F,S,SS)

EIN 4949 Co-Op Work Experience (1-3). Practical co-op work experience under approved industrial supervision. Written report required at the conclusion of the work assignment. Prerequisite: Permission of department chairperson. (F,S,SS)

EIN 5106 Regulatory Aspects of Engineering (3). A survey of the legal and regulatory requirementws encountered by engineers. Included will be OSH Act, NIOSH, ADA, EEOC, Worker's Compensation and Product Liability. Prerequisite: senior standing.

EIN 5226 Total Quality Management for Engineers (3). Fundamentals of TQM and its historical development. Integration of QC and management tools, QFD, benchmarking, experimental design for scientific management.(F,S)

EIN 5249 Occupational Biomechanics (3). Study of the theoretical fundamentals for the mechanics of the body. The link system of the body and kinematic aspects of body movement including applications of biomechanics to work systems. (S)

EIN 5322 Engineering Management (3). Organization of engineering systems including production and service organizations. Inputs of human skills, capital, technology, and managerial activities to produce useful products and services. (F,S)

EIN 5332 Quality Engineering (3). This course examines quality control from an engineering standpoint. It covers ways to meet the challenge of designing high-quality products and processes at low cost. Prerequisite: EIN 3331 or equivalent. (S)

EIN 5359 Industrial Financial Decisions (3). The use of financial techniques and data in planning, controlling and coordinating industrial activities. This course will familiarize the student with accounting concepts and analytical methods. Prerequisite: EIN 3354. (SS)

EIN 5367 Design of Production Systems (3). The design of an industrial enterprise including feasibility, plant layout, equipment specifications, auxiliary services, economics and scheduling. Prerequisite: EIN 3365. (SS)

EIN 5392 Design and Implementation of Discrete Manufacturing Systems (3). Methodology and techniques for design, planning and implementation of discrete production systems including process/machine selections, material handling and inspection technologies, cell control, etc. Prerequisites: Graduate or seniors with EIN 3365, EIN 3390, and ESI 3523 or equivalent.

EIN 5605 Robotic Assembly Cell (3). Concepts of robot manipulation and sensing, part design for robotic assembly, planning manipulator trajectories, machine vision, robot programming language, cell control, and material transfer. Prerequisite: EIN 3600. (S)

ESI 3161 Industrial Applications of Microprocessors (3). Basic concepts of microprocessors; an overview of computer architecture, local area networks, micro-mainframe linking, and operating systems as they apply to industrial systems. (F,S)

ESI 3314 Generic Models of Industrial Systems I (3). Modeling principles with emphasis on linear programming and extensions. The simplex procedure and its application through computer software packages. The analysis and interpretation of results in decision making. Prerequisite: MAC 2312, permission of the instructor. (F,S)

ESI 3523 Simulation Models of Industrial Systems (2). Simulation methodology, design of simulation experi- ments, implementation of simulation effort through computer software. Application to the solution of industrial and service system problems. Prerequisites: CGS 2423 or equivalent, ESI 3161, ESI 3314 and EIN 3235 or equivalent. Corequisite: ESI 3523L. (F,S)

ESI 3523L Simulation Models of Industrial System Laboratory (1). Simulation Modeling on a microcomputer. Analyze and validate design models using both a general purpose programming language and a special-purpose simulation language. Corequisite: ESI 3523. (F,S)

ESI 4315 Generic Models of Industrial Systems II (3). Modeling principles with emphasis on applications of Markov Chains, queuing models, systems reliability, Bayesian decision analysis. Prerequisites: ESI 3314, EIN 3235 or equivalent. (F,S)

ESI 4452 Project Management Systems Design (3). Project planning, scheduling and control using activity network logic. System development techniques and strategies. Prerequisite: Permission of the instructor. (F,S)

ESI 4554 ISE Systems Design (3). To integrate all prior ISE required courses into a cohesive and consistent professional philosophy. Prerequisite: Permission of the instructor. (F,S)

ESI 4556 Industrial and Systems Engineering in the Office (3). Paperwork reduction, overhead and expense cost containment, and white collar productivity through office automation and systems analysis.

Mechanical Engineering

Richard Irey, *Professor and Chairperson*
Yiding Cao, *Associate Professor*
M. Ali Ebadian, *Professor*
Gordon Hopkins, *Professor and Dean*
W. Kinzy Jones, *Professor*
Umit Koylu, *Assistant Professor*
Cesar Levy, *Professor*
James E. Moore, Jr., *Associate Professor*
Norman Munroe, *Associate Professor*
Mordechai Perl, *Courtesy Professor*
Luis Pujol, *Instructor*
Carmen Schenck, *Advisor/Instructor*
Richard Schoephoerster, *Associate Professor*
Ibrahim Tansel, *Associate Professor*
Sabri Tosunoglu, *Associate Professor*
Kuang Hsi Wu, *Professor*
Tachung Yih, *Professor*

The academic program provides a well-balanced curriculum in the following three major areas of Mechanical Engineering:

Fluid/Thermal Science
Mechanics and Materials
Design and Manufacturing

Further specializations in any of the following areas may be obtained by the proper choice of electives:

Environmental and Waste Management
Energy Systems
Heating, Ventilation, and Air Conditioning
Mechanics and Material Sciences
Biomechanics and Bioengineering
Manufacturing
Robotics
Design
Computer-Aided Engineering

The courses in the Manufacturing Methods area and Robotics are offered by both the Mechanical and the Industrial Engineering Departments. Biomechanics and Biomedical Engineering are interdisciplinary studies with courses offered by both the Mechanical and Electrical and Computer Engineering Departments. The courses in the Environmental and Waste Management area are offered by the Mechanical and Civil Engineering Departments.

A Bachelor's degree in Mechanical Engineering provides students with the background suitable for immediate employment in engineering industries, as well as excellent preparation for graduate studies in Engineering, Medicine, Law, or Business Administra-tion.

Bachelor of Science in Mechanical Engineering

Common Prerequisites

CHM	General Chemistry I
CHM	General Chemistry Lab I
MAC 2311	Calculus I
MAC 2312	Calculus II
MAC 2313	Multivariable Calculus
MAP 2302	Differential Equations
	or
EGM 3311	Analysis of Engineering Systems
PHY	Physics with Calculus I
PHY	General Physics Lab I
PHY	Physics with Calculus II
PHY	General Physics Lab II

Degree Program Hours: 128

The qualifications for admissions to the Department of Mechanical Engineering are the same as for admission to the School of Engineering.

The academic program is designed to satisfy the criteria outlined by the Accreditation Board for Engineering and Technology (ABET), as well as to meet the State of Florida's articulation policy. Entering freshmen at FIU should seek advisement from the Undergraduate Studies Office as well as from the Mechanical Engineering Department's office of advisement.

The minimum requirements for graduation in Mechanical Engineering consist of two parts: 1) Mathematics, Basic Sciences, Humanities and Social Sciences requirements, and 2) Engineering Sciences, Engineering Design, Labor-atory and Elective requirements. De-tailed outlines are given below:

Minimum semester credit hours requirements in the area of Mathematics, Basic Sciences, Humanities, Social Sciences, and Computer Programming:

Mathematics, including Elective	18
Chemistry and Physics with Laboratories	12
Computer Programming	3
English	6
Humanities and Social Science	16

In meeting the requirement in Humanities and Social Sciences, the student should take at least two courses which form a coherent sequence.

Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog's General Information for Admissions and the Office of the Registrar.

Mechanical Engineering Curriculum

Engineering Science, Engineering Design, Laboratory and Elective semester credit hours requirements:

EGN 1100	Introduction to Engineering	2
EML 2030	Software for Mechanical Design	3
EGN 3311	Statics[1]	3
EGN 3321	Dynamics[1]	3
EGN 3365	Materials in Engineering[1]	3
EMA 3702	Mechanics and Material Science[1]	3
EMA 3702L	Mechanics and Materials Science Lab	1
EML 3126	Transport Phenomena[1]	3
EML 3126L	Transport Phenomena Lab	1
EGN 3343	Thermodynamics I[1]	3
EML 3101	Thermodynamics II	3
EML 3262	Kinematics & Mechanism Design	3
EML 4220	Mechanical Vibrations	3
EML 4312	Automatic Control Theory	3
EML 4140	Heat Transfer	3
EIN 3390	Manufacturing Processes	2
EIN 3390L	Manufacturing Processes Lab	1
EEL 3003	Electrical Engineering I	3
EEL 3111L	Circuit Lab I	
EML 3301L	Instrumentation & Measurement Lab	1
EML 4906L	Mechanical Lab I	1
EML 4421L	Mechanical Lab II	1
EML 3500	Mechanical Design I	3
EML 4501	Mechanical Design II	3
EML 4706	Design of Thermal and Fluid Systems	3
EML 4xxx	Design Project Organization[2]	1
EML 4905	Senior Design Project[2]	3
Design Elective[3]		3
Engineering Electives		7
Math/Statistics Elective[4]		3

[1]These courses are four contact hours to include a one-hour non-credit tutorial.

[2]The Senior Design Project is taken in two consecutive semesters during the senior year. During the first semester of their senior year, the student must register for Design Project Organization. The senior project is begun during this course. The next semester the student must register for EML 4905 to complete the project.

[3]Approved Design electives:

EML 4xxx	Finite Element Method in Mechanical Design	3
EML 4503	Production Machine Modeling and Design	3

EML 4525	Mechanical Design Synthesis and Analysis	3
EML 4535	Mechanical Computer Aided Design	3
EML 4561	Introduction to Electronic Packaging	3
EML 4985	Design of Biomedical Systems and Devices	3
EML 4603	Air Conditioning Design	3
EML 5509	Mechanical Design Optimization	3
EML 5519	Fault-Tolerant System Design	3
EIN 4395	Computer Integrated Manufacturing	3

[4]Approved Math/Statistics Electives:

EIN 3235	Evaluation of Engineering Data	3
STA 3033	Introduction to Probability and Statistics for CS	3
EEL 3135	Signals and Systems	3
MAS 3135	Linear Alegbra	3
MAP 4401	Advanced Differential Equations	3

Students must maintain and achieve a grade point average of 2.0 or better in those engineering courses to be used to satisfy BSME degree requirements. This "major GPA" is computed in the manner of the overall GPA. Courses that are excluded from the calculation of the overall GPA will also be excluded from the calculation of the major GPA. Students failing to maintain a major GPA of 2.0 will be placed on major GPA probation, suspension, or dismissed from the program according to the same criteria as are utilized with the overall GPA.

Students who are dismissed from the University due to low grades may appeal to the Dean for reinstatement. A second dismissal results in no possibility of reinstatement.

Laboratories

Over and above the laboratory requirements in Physics and Chemistry, the program consists of five semester hours of required Engineering laboratory work. The students are assigned three hours of laboratory work (one hour each in Instrumentation and Measurement Lab, and Mechanical Lab) which are specifically devoted to solving design problems using experimental methods. The laboratory experience includes the following areas: Machining, Circuits, Fluid Mechanics, Mechanics of Materials and Materials Testing, Advanced Applications in Fluid and Thermal Science, Instrumentation and Measurement, and Vibration Laboratory.

The elective areas offer the following additional laboratories: Air Conditioning and Refrigeration, Biomedical Engineering, Material Sciences, Computer/Aided Design, and Computer/Integrated Manufacturing.

Electives

Four concentrations available within the Mechanical Engineering program with some of their elective offerings are listed below.

Fluids/Thermal Sciences and Energy Systems

EML 3450	Energy Systems	3
EML 4xxx	Finite Element Method in Mechanical Design	3
EML 4419	Propulsion Systems	3
EML 4421	Internal Combustion Engines	3
EML 4525	Mechanical Design Synthesis and Analysis	3
EML 4601	Refrigeration and Air Conditioning	3
EML 4601L	Refrigeration and A/C Lab	1
EML 4603	Air Conditioning Design	3
EML 4608C	Mechanical Systems in Environmental Control	3
EML 4702	Fluid Dynamics	3
EML 4711	Gas Dynamics	3
EML 5103	Intermediate Thermodynamics	3
EML 5104	Classical Thermodynamics	3
EML 5152	Intermediate Heat Transfer	3
EML 5606C	Advanced Refrigeration and A/C Systems	3
EML 5615C	CAD in Air Conditioning	3
EML 5708	Advanced Design of Thermal and Fluid Systems	3
EML 5709	Intermediate Fluid Mechanics	3

Mechanics, Materials and Design

EGM 3311	Analysis of Mechanical Systems	3
EGM 4610	Introduction to Continuum Mechanics	3
EGM 5315	Intermediate Analysis of Mechanical Systems	3
EGM 5615	Synthesis of Engineering Mechanics	3
EGN 5367	Industrial Materials and Engineering Design	3
EMA 3066	Polymer Science and Engineering	3
EMA 4121	Physical Metallurgy	3
EMA 4121L	Materials Laboratory	1
EMA 4223	Mechanical Metallurgy	3
EMA 5295	Principles of Composite Materials	3
EMA 5507C	Analytical Techniques of Material Sciences	3
EMA 5935	Advanced Topics in Materials Engineering	3
EML 3222	System Dynamics	3
EML 3301C	Instrumentation	3
EML 4xxx	Finite Element Method in Mechanical Design	3
EML 4260	Dynamics of Machinery	3
EML 4525	Mechanical Design Synthesis and Analysis	3
EML 4535	Mechanical Computer-Aided Design	3
EML 4561	Introduction to Electronic Packaging	3
EML 5125	Classical Dynamics	3
EML 5385	Identification Techniques of Mechanical Systems	3
EML 5530	Intermediate CAD/CAE	3
EML 5562	Advanced Electronic Packaging	3

Biomechanics and Biomedical Engineering

EEL 5071	Bioelectrical Models	3
EEL 5085	Bioradiation Engineering	3
EGM 4580	Principles of Bioengineering	3
EGM 4580L	Biomedical Engineering Lab	1
EGM 4581	Biomechanics of Cardiovascular Systems	3
EGM 4582	Engineering Hemodynamics	3
EGM 4583	Orthopaedic Biomechanics	3
ELR 4202C	Medical Instrumentation Design	4
EML 4585	Design of Biomedical Systems & Devices	3

Manufacturing and Robotics

EIN 3600	Introduction to Robotics	2
EIN 4391	Product Design for Manufacturing and Automation	3
EIN 4395	Computer-Integrated Manufacturing	3
EML 4535	Mechanical Computer-Aided Design	3
EML 4561	Introduction to Electronic Packaging	3
EML 4806	Modeling and Control of Robots	3
EML 5562	Advanced Electronic Packaging	3

Students are required to complete ten credit hours of technical electives, three of which are approved design credits.

Students with special needs may take other elective courses (not listed above)

with permission of the Mechanical Engineering Advisor. Students are not restricted to these four areas but may choose courses, with the advisor's consent, that will form a coherent concentration area. Special topics may be counted as an elective.

Areas of Specialization

Air Conditioning and Refrigeration
Applied Mechanics
Bioengineering/Biomechanics
Computer-Aided Engineering
Computer-Integrated Manufacturing and Design
Energy Systems
Environmental and Waste Management
Finite Element Analysis
Fluid Mechanics
Heat Transfer
Material Sciences
Robotics
Thermal Science

In order to specialize in manufacturing, students need to collaborate with the faculty of the Industrial Engineering Department.

Options in Mechanical Engineering

The following options are available:

Heating, Ventilation and Air Conditioning Design Option

EML 4601	Refrigeration and Air Conditioning	3
EML 4601L	Refrigeration and Air Conditioning Lab	1
EML 4603	Air Conditioning Design	3
EML 4608	Mechanical Systems in Environmental Control	3
EIN 3235	Evaluation of Engineering Data	3
STA 3033	Probability and Statistics for Computer Science	3
EML 4535	Mechanical Computer-Aided Design	3
EIN 3390L	Manufacturing Lab	1

Biomechanical/Biochemical Option

EIN 3235	Evaluation of Engineering Data	3
STA 3033	Probability and Statistics for Computer Science	3
EML 4585	Design of Biomedical Systems and Devices	3
EGM 4581	Biomechanics of Cardiovascular Systems	3
EGM 4582	Engineering Hemodynamics	3

Mechanical Engineering Program Requirements

First Semester: (17)

MAC 2311	Calculus I[1]	4
CHM	General Chemistry I	
CHM	General Chemistry I Lab	
ENC 1101	Freshman Composition[1]	3
Humanities/Social Science[2]		3
EGN 1100	Introduction to Engineering	2
SLS 1501	Freshman Experience Seminar	1

Second Semester: (17)

MAC 2312	Calculus II[1]	4
PHY	Physics I with Calculus	
PHY	General Physics I Lab	1
ENC 1102	Literary Analysis[1]	3
EIN 3390	Manufacturing Processes	2
EIN 3390L	Manufacturing Processes Lab	1
Humanities/Social Science[2]		3

Third Semester: (17)

MAC 2313	Multivariable Calculus	4
PHY	Physics with Calculus II	
PHY	General Physics II Lab	
EGN 3311	Statics	3
EGN 3365	Materials in Eng	3
EML 2030	Software for Mechanical Design	3

Fourth Semester: (17)

MAP 2302	Differential Equations	3
EGN 3321	Dynamics	3
EEL 3003	Electrical Engineering I	3
EEL 3111L	Circuits Lab	1
EGN 3343	Thermodynamics I	3
EMA 3702	Mechanics and Materials Science	3
EMA 3702L	Mechanics and Materials Science Lab	1

Fifth Semester: (14)

EIN 3354	Engineering Economy	3
EML 3101	Thermodynamics II	3
EML 3126	Transport Phenomena	3
EML 3126L	Transport Phenomena Lab	1
EML 3262	Kinematics and Mechanisms Design	3
EML 3301L	Instrumentation and Measurement Lab	1

Sixth Semester: (15)

EML 4220	Mechanical Vibrations	3
EML 4140	Heat Transfer	3
EML 3500	Mechanical Design I	3
Math/Statistics Elective		3
Humanities/Social Science[2]		3

Seventh Semester: (16)

EML 4312	Automatic Control Theory	3
EML 4501	Mechanical Design II	3
EML 4706	Design of Thermal and Fluid Systems	3
EML 4xxx	Design Project Organization	1
Engineering Elective		3
Humanities/Social Science[2]		3

Eighth Semester: (15)

EML 4906	Mechanical Lab	1
EML 4905	Senior Design Project	3
Design Elective		3
Engineering Elective		4
Humanities/Social Science[2]		4

[1]Gordon Rule courses requiring a 'C' or better.
[2]All entering freshmen must satisfy the core curriculum requirements.
Note: All entering freshmen must satisfy a summer residency requirement. Freshmen must take a minimum of 9 credits during the summer semesters while at FIU.

This may be accomplished, for example, by taking six credits in one summer and three credits during another summer.

Five Year Accelerated Combined Degree Program in Mechanical and Biomedical Engineering*

The Mechanical and Chemical Engineering Department and the Biomedical Engineering Institute at Florida International University, with the Miami Cardiac & Vascular Institute, an affiliate of Baptist Health Systems of South Florida, offer a seamless, five-year, 150 credit hour combined BS/MS degree program designed to integrate the 128 credit hour undergraduate mechanical engineering curriculum with the 31 credit hour biomedical engineering Master's degree curriculum into a single, coherent program. The graduate of this program will earn a Bachelor's degree in mechanical engineering with a minor in biomedical engineering, and a Master's degree in biomedical engineering. Nine credit hours count towards both programs.

The program is designed to prepare the student with the fundamental knowledge of mechanical engineering along with the problem-solving skills in biomedical engineering necessary for effective practice in the biomedical industry.

In addition to the University's undergraduate admission requirements, students seeking admission into this program must have either a 3.5 high school grade point average or a score of 1100 or better on the Scholastic Aptitude Test (SAT). The accepted qualified students are admitted into the mechanical engineering program and receive provisional early acceptance

into the biomedical engineering graduate program.

Students must maintain and achieve a grade point average of 2.5 or better in those engineering courses to be used to satisfy the combined BS/MS requirements. This "major GPA" is computed in the manner of the overall GPA. Courses that are excluded from the calculation of the overall GPA will also be excluded from the calculation of the major GPA. Students failing to maintain a major GPA of 2.5 will be placed on probation, suspension, or dismissed from the BS/MS program according to the same criteria as are utilized with the overall GPA.

All other general requirements for the mechanical engineering program apply to the combined BS/MS program.

Curriculum

The curriculum consists of six core areas: Liberal Arts, Basic Sciences, Life Sciences, Basic Engineering. Mechanical Engineering, and Biomedical Engineering.

Liberal Arts core		
Humanities/Social Science		16
ENC 1101	Freshman Composition	3
ENC 1102	Literary Analysis	3
SLS 1501	Freshman Experience	1
Basic Science Core		
CHM	General Chemistry I	3
CHM	General Chemistry I Lab	1
CHM	General Chemistry II	3
CHM	General Chemistry II Lab	1
MAC 2311	Calculus I	4
MAC 2312	Calculus II	4
MAC 2313	Multivariable Calculus	4
MAP 2302	Differential Equations	3
PHY	Physics with Calculus I	3
PHY	General Physics Lab I	1
PHY	Physics with Calculus II	3
PHY	General Physics Lab II	1
Life Sciences Core		
BSC 1010	General Biology	3
BSC 1010L	General Biology I Lab	1
BME	Physiology for Engineers	3
Life Science Elective		3
STA 6176	Biostatistics	3
Basic Engineering Core		
CGS 2423	C for Engineers or equivalent	3
EGN 3365	Materials in Engineering	3
Engineering Elective		6
STA 3033	Introduction to Probability and Statistics for CS or equivalent	3
Mechanical Engineering Core		
EGN 3311	Statics	3
EGN 3321	Dynamics	3
EMA 3702	Mechanics and Materials Science	3
EMA 3702L	Mechanics and Materials Science Lab	1
EML 3126	Transport Phenomena	3
EML 3126L	Transport Phenomena Lab	1
EGN 3343	Thermodynamics I	3
EML 3262	Kinematics & Mechanism Design	3
EML 4312	Automatic Control Theory	3
EML 4140	Heat Transfer	3
EIN 3390	Manufacturing Processes	2
EIN 3390L	Manufacturing Processes Lab	1
EEL 3003	Electrical Engineering I	3
EEL 3111L	Circuits Lab	1
EML 4906L	Mechanical Lab I	1
EML 3500	Mechanical Design I	3
EML 4220	Mechanical Vibrations	3
Biomedical Engineering Core		
EGM 4580	Principles of Bioengineering	3
BME	Clinical Rotation for Engineers	1
EMA 5584	Biomaterials Science	3
ELR 4202C	Medical Intrumentation	3
EML 4585	Design of Biomedical Systems and Devices	3
BME	Design/Thesis Project I	1
BME	Design/Thesis Project II	6
Biomedical Engineering Elective		6
BME	Biomedical Engineering Seminar	1

The electives must be chosen with the advisor such that the program contains at least 25 credit hours of 5000 level (or higher) courses. Students must maintain a GPA of 3.0 on all graduate level courses. No grade below a "C" will be accepted for graduate level courses.

The Clinical Rotation for Biomedical Engineering course is scheduled much like a laboratory course and will meet once per week for 3 hours. The course is conducted through the Miami Cardiac and Vascular Institute.

For the BS/MS program, the senior design project is combined with the Master's thesis project into one capstone project for the combined program. The first design/thesis project course is used to organize the students into teams and assign projects. The projects are supplied by an industry representative from the corporate partners of the Biomedical Engineering Institute. Each project team will have an advising committee which will include a Biomedical Engineering Institute faculty advisor, a representative of the industry partner, and a life sciences or clinical representative. The design/thesis project is publicly defended as required for the Master's thesis for the biomedical engineering Master's degree program.

Course Sequence

First Semester: (15)		
MAC 2311	Calculus I	3
CHM	General Chemistry I	3
CHM	General Chemistry I Lab	1
Humanities/Social Science		3
ENC 1101	Freshman Composition	3
SLS 1501	Freshman Experience	1
Second Semester: (18)		
MAC 2312	Calculus II	4
PHY	Physics with Calculus I	3
PHY	General Physics Lab I	1
CGS 2423	C for Engineers or equivalent	3
ENC 1102	Literary Analysis	3
CHM	General Chemistry II	3
CHM	General Chemistry II Lab	1
Third Semester: (17)		
MAC 2313	Multivariable Calculus	4
PHY	Physics with Calculus II	3
PHY	General Physics Lab II	1
EGN 3311	Statics	3
EGN 3365	Materials in Engineering	3
Humanities/Social Science		3
Fourth Semester: (17)		
MAP 2302	Differential Equations	3
EGN 3321	Dynamics	3
Humanities/Social Science		3
EMA 3702	Mechanics and Materials Science	3
EMA 3702L	Mechanics and Materials Science Lab	1
BSC 1010	General Biology I	3
BSC 1010L	General Biology I Lab	1
Fifth Semester: (17)		
EML 3126	Transport Phenomena	3
EML 3126L	Transport Phenomena Lab	1
EGN 3343	Thermodynamics I	3
EML 3262	Kinematics & Mechanism Design	3
EEL 3003	Electrical Engineering I	3
EEL 3111L	Circuits Lab	1
BME	Physiology for Engineers	3

Sixth Semester: (16)

EML 4140	Heat Transfer	3
EML 3500	Mechanical Design I	3
EIN 3390	Manufacturing Processes	2
EIN 3390L	Manufacturing Processes Lab	1
Humanities/Social Science		3
EGM 4580	Principles of Bioengineering	3
BME	Clinical Rotation for Biomedical Engineering	1

Seventh Semester: (15)

EML 4312	Automatic Control Theory	3
EML 4906L	Mechanical Lab I	1
Humanities/Social Science		4
Engineering Elective		3
ELR 4202C	Medical Instrumentation	4

Eighth Semester: (13)

STA 3033	Introduction to Probability and Statistics for CS or equivalent	3
EML 4220	Mechanical Vibrations	3
Biomedical Engineering Elective		3
EML 4585	Design of Biomedical Systems and Devices	3
BME	Design/Thesis Project I	1

Ninth Semester: (12)

BME	Design/Thesis Project II	6
STA 6176	Biostatistics	3
EMA 5584	Biomaterials Science	3

Tenth Semester: (10)

Life Science Elective		3
Biomedical Engineering Elective		3
Engineering Elective		3
BME	Biomedical Engineering Seminar	1

The sequence is designed so that a student has the option to withdraw from the program after eight semesters and graduate with a BS in Mechanical Engineering with a minor in Biomedical Engineering by replacing the biomedical engineering elective in the eighth semester with the Senior Design Project II for a total of 128 credit hours.

*The Master's degree in Biomedical Engineering is subject to approval by the Florida Board of Regents in July, 1999.

Bachelor of Science in Chemical Engineering

Common Prerequisites

CHM	General Chemistry I
CHM	General Chemistry Lab I
MAC 2311	Calculus I
MAC 2312	Calculus II
MAC 2313	Multivariable Calculus
MAP 2302	Differential Equations
	or
EGM 3311	Analysis of Engineering Systems
PHY	Physics with Calculus I
PHY	General Physics Lab I
PHY	Physics with Calculus II
PHY	General Physics Lab II

Degree Program Hours: 128

The Chemical Engineering curriculum is designed to prepare graduates to apply the principles of chemical engineering to the design and operation of chemical process systems. Proper selection of electives allows a graduate to develop background in physiology as preparation for a career in biochemical applications to the filed of biomedical engineering.

Lower Division Preparation

It is required that FIU undergraduates complete the common prerequisite courses listed above with a 2.5 GPA. In addition, FIU undergraduates must meet all lower division requirements to include: CLAST, two Gordon Rule courses, two English composition courses and 16 hours of humanities/social science. Progress toward the baccalaureate degree is facilitated by the completion of the General Chemistry sequence (second course with laboratory) as well as the two course sequence in Organic Chemstry with laboratories.

Foreign Language Requirement

Students must meet the University foreign language requirement. Refer to the Catalog's section on General Information for Admissions and the Office of the Registrar.

Upper Division Program

The upper division program includes continuation of the science component of the program with a two course sequence in Physical Chemistry (with laboratories) with the option of substituting an elective course in the biological science for the second course in the Physical Chemistry sequence. The remaining 38 credits of required courses include a senior design project and an additional 11 credits of technical elective. The latter permit students to develop their programs in areas of specific interest.

Chemical Engineering Program Requirements

First Semester: (17)

MAC 2311	Calculus I	4
CHM	General Chemistry I	3
CHM	General Chemistry I Lab	1
ENC 1101	Freshman Composition	3
Humanities/Social Science		3
EGN 1100	Introduction to Engineering	2
EGN 1110C	Engineering Drawing	0
SLS 1501	Freshman Experience	1

Second Semester: (17)

MAC 2312	Calculus II[1]	4
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CGS 2423	C Programming for Engineers	3
ENC 1102	Literacy Analysis	3
Humanities/Social Science[2]		3

Third Semester: (16)

MAC 2313	Multivariable Calculus	4
PHY	Physics with Calculus I	3
PHY	Physics with Calculus I Lab	1
CHM 2210	Organic Chemistry I	4
CHM 2210L	Organic Chemistry I Lab	1
Humanities /Social Science[2]		3

Fourth Semester: (15)

MAP 2302	Differential Equations	3
PHY	Physics with Calculus II	3
PHY	Physics with Calculus II Lab	1
CHM 2211	Organic Chemistry II	4
CHM 2211L	Organic Chemistry Lab II	1
EML 3343	Thermodynamics I	3

Fifth Semester: (16)

CHM 3410	Physical Chemistry I	4
CHM 3410L	Physical Chemistry I Lab	1
EML 3101	Thermo II for Chem Engineers	3
EML 3126	Transport Phenomena	3
EML 3126L	Transport Phenomena Lab	1
EEL 3003	Electrical Engineering I	3
EEL 3003L	Electrical Engineering Lab I	1

Sixth Semester: (16 or 14)

CHM 3411	Physical Chemistry II	4
CHM 3411L	Physical Chemsitry Lab II	2
	or	
BCH 1010	General Biology	3
BCH 1010L	General Biology Lab I	1
	or	
PCB 4733	Human Systemic Phys.	13
PCB 4733L	Human Systemic Phys.Lab I	1
EML 4140	Heat Transfer	3

EML xxxx	Chemical Reaction Engineering	3
EML xxxx	Design of Separation Processes	3
EML 3301L	Instrumentation & Measurement Lab	1

Seventh Semester: (15 or 17)

EML xxxx	Design of Chemical Engineering Processes	3
EML xxxx	Chemical Engineering Lab I	2
EML 4312	Automatic Control Theory	3
EML 4xxx	Design Project Organization	1
EIN 3354	Engineering Economy	3
Technical Elective		3 or 5

Eighth Semester: (17)

EML	Chemical Engineering Lab II	2
EML 4905	Senior Design Project	3
Technical Elective		3
Humanities/Social Science		10

[1]Gordon Rule courses requiring a 'C' or better.

[2]All entering freshmen must satisfy the core curriculum requirements.

Five Year Accelerated Combined Degree Program in Chemical and Biomedical Engineering*

The Mechanical and Chemical Engineering Department and the Biomedical Engineering Institute at Florida International University, with the Miami Cardiac & Vascular Institute, an affiliate of Baptist Health Systems of South Florida, offer a seamless, five-year, 150 credit hour combined BS/MS degree program designed to integrate the 128 credit hour undergraduate chemical engineering curriculum with the 31 credit hour biomedical engineering Master's degree curriculum into a single, coherent program. The graduate of this program will earn a Bachelor's degree in chemical engineering with a minor in biomedical engineering, and a Master's degree in biomedical engineering. Nine credit hours count towards both programs.

The program is designed to prepare the student with the fundamental knowledge of chemical engineering along with the problem-solving skills in biomedical engineering necessary for effective practice in the biomedical industry.

In addition to the University's undergraduate admission requirements, students seeking admission into this program must have either a 3.5 high school grade point average or a score of 1100 or better on the Scholastic Aptitude Test (SAT). The accepted qualified students are admitted into the chemical engineering program and receive provisional early acceptance into the biomedical engineering graduate program.

Students must maintain and achieve a grade point average of 2.5 or better in those engineering courses to be used to satisfy the combined BS/MS requirements. This "major GPA" is computed in the manner of the overall GPA. Courses that are excluded from the calculation of the overall GPA will also be excluded from the calculation of the major GPA. Students failing to maintain a major GPA of 2.5 will be placed on probation, suspension, or dismissed from the BS/MS program according to the same criteria as are utilized with the overall GPA.

All other general requirements for the chemical engineering program apply to the combined BS/MS program.

Curriculum

The curriculum consists of six core areas: Liberal Arts, Basic Sciences, Life Sciences, Basic Engineering. Mechanical Engineering, and Biomedical Engineering.

Liberal Arts core

Humanities/Social Science		16
ENC 1101	Freshman Composition	3
ENC 1102	Literary Analysis	3
SLS 1501	Freshman Experience	1

Basic Science Core

CHM	General Chemistry I	3
CHM	General Chemistry I Lab	1
CHM	General Chemistry II	3
CHM	General Chemistry II Lab	1
MAC 2311	Calculus I	4
MAC 2312	Calculus II	4
MAC 2313	Multivariable Calculus	4
MAP 2302	Differential Equations	3
PHY	Physics with Calculus I	3
PHY	General Physics Lab I	1
PHY	Physics with Calculus II	3
PHY	General Physics Lab II	1

Life Sciences Core

BSC 1010	General Biology I	3
BSC 1010L	General Biology I Lab	1
BME xxxx	Physiology for Engineers	3
Life Science Elective		3
STA 6176	Biostatistics	3

Basic Engineering Core

CGS 2423	C for Engineers or equivalent	3
EGN 3365	Materials in Engineering	3
Engineering Elective		6
STA 3033	Introduction to Probability and Statistics for CS or equivalent	3

Chemical Engineering Core

CHM 2210	Organic Chemistry I	4
CHM 2210L	Organic Chemistry I Lab	1
CHM 2211	Organic Chemistry II	4
CHM 2211L	Organic Chemistry Lab II	1
EGN 3343	Thermodynamics I	3
ECH 3123	Thermodynamics II for Chemical Engineering	3
EML 3126	Transport Phenomena	3
EML 3126L	Transport Phenomena Lab	1
EML 4140	Heat Transfer	3
EML 4312	Automatic Control Theory	3
ECH 4522	Chemical Reaction Engineering	3
EML xxxx	Design of Staged Separation Processes	3
ECH 4641	Design of Chemical Engineering Processes	3
EEL 3003	Electrical Engineering I	3
EEL 3003L	Electrical Engineering Lab I	1
ECH 4242L	Cemical Engineering Lab I	2

Biomedical Engineering Core

EGM 4580	Principles of Bioengineering	3
BME	Clinical Rotation for Engineers	1
ECH	Biochemical Engineering	3
ELR 4202C	Medical Intrumentation	4
EML 4585	Design of Biomedical Systems and Devices	3
BME	Design/Thesis Project I	1
BME	Design/Thesis Project II	6
Biomedical Engineering Elective		6
BME	Biomedical Engineering Seminar	1

The electives must be chosen with the advisor such that the program contains at least 25 credit hours of 5000 level (or higher) courses. Students must maintain a GPA of 3.0 on all graduate level courses. No grade below a "C" will be accepted for graduate level courses.

The Clinical Rotation for Biomedical Engineering course is scheduled much

like a laboratory course and will meet once per week for 3 hours. The course is conducted through the Miami Cardiac and Vascular Institute.

For the BS/MS program, the senior design project is combined with the Master's thesis project into one capstone project for the combined program. The first design/thesis project course is used to organize the students into teams and assign projects. The projects are supplied by an industry representative from the corporate partners of the Biomedical Engineering Institute. Each project team will have an advising committee which will include a Biomedical Engineering Institute faculty advisor, a representative of the industry partner, and a life sciences or clinical representative. The design/thesis project is publicly defended as required for the Master's thesis for the biomedical engineering Master's degree program.

Course Sequence

First Semester: (15)		
MAC 2311	Calculus I	3
CHM	General Chemistry I	3
CHM	General Chemistry I Lab	1
Humanities/Social Science		3
ENC 1101	Freshman Composition	3
SLS 1501	Freshman Experience	1
Second Semester: (18)		
MAC 2312	Calculus II	4
PHY	Physics with Calculus I	3
PHY	General Physics Lab I	1
CGS 2423	C for Engineers or equivalent	3
ENC 1102	Literary Analysis	3
CHM	General Chemistry II	3
CHM	General Chemistry II Lab	1
Third Semester: (16)		
MAC 2313	Multivariable Calculus	4
PHY	Physics with Calculus II	3
PHY	General Physics Lab II	1
CHM 2210	Organic Chemistry I	4
CHM 2210L	Organic Chemistry I Lab	1
Humanities/Social Science		3
Fourth Semester: (17)		
MAP 2302	Differential Equations	3
Humanities/Social Science		3
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1
EGN 3343	Thermodynamics I	3
BSC 1010	General Biology I	3
BSC 1010L	General Biology I Lab	1
Fifth Semester: (17)		
EML 3126	Transport Phenomena	3
EML 3126L	Transport Phenomena Lab	1
ECH 3123	Thermodynamics II for Chemical Engineering	3
EGN 3365	Materials in Engineering	3
EEL 3003	Electrical Engineering I	3
EEL 3003L	Electrical Engineering I Lab	1
BME	Physiology for Engineers	3
Sixth Semester: (16)		
EML 4140	Heat Transfer	3
ECH 4522	Chemical Reactions Engineering	3
EML	Design of Staged Seperations Processes	3
Humanities/Social Science		3
EGM 4580	Principles of Bioengineering	3
BME	Clinical Rotation for Biomedical Engineering	1
Seventh Semester: (17)		
EML 4312	Automatic Control Theory	3
Humanities/Social Science		4
Engineering Electvive		3
ECH 4641	Design of Chemical Engineering Processes	3
ELR 4202C	Medical Instrumentation	4
Eighth Semester: (13)		
STA 3033	Introduction to Probability and Statistics for CS or equivalent	3
ECH 4242L	Chemical Engineering Lab I	1
Biomedical Engineering Elective		3
EML 4585	Design of Biomedical Systems and Devices	3
BME	Design/Thesis Project I	1
Ninth Semester: (12)		
BME	Design/Thesis Project II	6
STA 6176	Biostatistics	3
ECH	Biochemical Engineering	3
Tenth Semester: (10)		
Life Science Elective		3
Biomedical Engineering Elective		3
Engineering Elective		3
BME	Biomedical Engineering Seminar	1

The sequence is designed so that a student has the option to withdraw from the program after eight semesters and graduate with a BS in Chemical Engineering with a minor in Biomedical Engineering by replacing the biomedical engineering elective in the eighth semester with the Senior Design Project II for a total of 128 credit hours.

*The Master's degree in Biomedical Engineering is subject to approval by the Florida Board of Regents in July, 1999.

Course Descriptions

Definition of Prefixes

EGM - Engineering Mechanics; EGN - Engineering; General; EMA - Engineering; Materials; EML - Engineering: Mechanical

ECH 3123 Chemical Engineering Thermodynamics II (3). Properties of single component systems using corresponding states, non-reacting mixtures, phase equilibrium in mixtures, chemical reactions and thermodynamic equilibrium in reacting systsm. Prerequisite: EGN 3343 and CHM 1046.

ECH 3704 Principles of Industrial Electrochemistry (3). This course provides a detailed analysis of several industrial processes in the field of electrometallurgy. The emphasis is on a discussion of the principles of the processes. Prerequisite: CHM 3410 and CHM 3411.

ECH 4242L Chemical Engineering Lab I (1). Demonstrates thermodynamic, heat, mass and momentum transport principles through experimental practice. Prerequisite: ECH 3123nad EML 4140.

ECH 4243L Chemical Engineering II (1). Demonstrates reactor design and control and mass transfer by diffusion and convection. Prerequisite: ECH 4242L.

ECH 4522 Chemical Reaction Engineering (3). The design of commercial reactors considering the influence of kinetics and transport phenomena under batch, plug flow and well-stirred conditions as well as residence time limited reactors. Prerequisite: ECH 3123, EML 3126, and CHM 3411.

ECH 4641 Design of Chemical Engin-eering Process (3). Specification, simulation and optimization of process flow sheets. Component specification and design considering operability, environmental impact, safety and economic viability. Prerequisite: ECH 3123, EML 3126, and CHM 3411.

ECH 4643 Design Project I (1). Design project organization to include objectives, concept selection, prelimin-

ary and detail design, prototype development and testing. Oral and written presentation of design plan by project team.

ECH 4645 Design Project II (3). Continuation of design project from Senior Design I. Final Design Report and presentation. Prototype construction, performance evaluation, demonstration and presentation. Prerequisite: ECH 4643.

ECH 4706 Engineering Application of Electrochemistry (3). The purpose of this course is to apply the fundamental knowledge acquired in the prerequired course "Principles of Industrial Electrochemistry" to the detailed analysis of several industrial processes. Prerequisite: CHM 3410 and CHM 3411.

ECH 4826 Corrosion Control (3). Various forms of corrosion including pitting, stress, crevice, galvanic and microbial induced corrosion are presented. The problems of material selection, failure analyses and corrosion control are discussed. Prerequisite: EGN 3365 and CHM 3411

EGM 3311 Analysis of Engineering Systems (3). Analysis of engineering problems, from modeling principles to their solution via linear and nonlinear differential equations. Lumped parameter analysis and numerical methods available for solutions. Prerequisite: EGN 3321 and MAC 2313.

EGM 3503 Applied Mechanics (3). Statics and dynamics of solids and fluids. Science of engineering materials. Open to non-mechanical engineering students only. Prerequisite: Permission of the instructor.

EGM 4580 Principles of Bioengineering (3). Medical instrumentation and design, regulations for medical devices, application of computers in medicine, biomaterials, biocommunications, artificial implants; clinical engineering. Prerequisite: Permission of the instructor.

EGM 4580L Biomedical Engineering Lab (1). Introduction to the principles of biological signal measurements, biological data acquisition and image processing. Prerequisite: Permission of the instructor.

EGM 4581 Biomechanics of Cardiovascular Systems (3). Functional cardiovascular physiology and anatomy; analysis and computation of cardiovascular flow; constitutive properties of tissue; coronary and systemic circulation; flow and stress considerations in cardiovascular assist devices. Prerequisites: EMA 3702 and EML 3126.

EGM 4582 Engineering Hemodynamics (3). Fluid Mechanics of the circulatory system, rheology of blood, lubrication mechanics. Prerequisite: EML 3126 and EML 3126L.

EGM 4583 Orthopaedic Biomechanics (3). Introduction to the fundamentals of human musculo-skeletal physiology and anatomy and computation of mechanical forces as it applies to orthopaedic biomechanics. Prerequisites: EGN 3321 and EMA 3702.

EGM 4610 Introduction to Continuum Mechanics (3). Introduction to modern continuum mechanics, mathematical preliminaries, stress and equilibrium, deformations and compatibility, constitutive equations, balance laws, problem solution strategies. Prerequisite: EMA 3702

EGM 5315 Intermediate Analysis of Mechanical Systems (3). First course at the graduate level in the analysis of mechanical systems. Modeling of the system and analytical and numerical methods of solution of the governing equations will be studied. Fluid and thermodynamic systems will be emphasized in this course. Prerequisite: EGM 3311, MAP 2302, or permission of the instructor.

EGM 5346 Computational Engineering Analysis (3). Application of computational methods to mechanical engineering problems of translational, rotational, control, thermal and fluid systems employing linear/nonlinear system elements. Prerequisites: EML 2030 or CGS 2420, MAP 2302 or EGM 3311, EML 3222, MAP 2302 or EGM 3311 or permission of the instructor.

EGM 5354 Finite Element Method Applications in Mechanical Engineering (3). Utilize the finite element method to solve problems in heat transfer, fluid dynamics, diffusion, acoustics, vibrations, and electromagnetism, as well as the coupled interaction of these phenomena. Prerequisites: CGS 2420 or EML 2030, EMA 3702, and EML 4140.

EGM 5585 Biotransport Processes (3). Transport of fluid, heat, and mass in the human body. Application to dialyzers and heart-lung devices. Prerequisites: EML 3126L and EML 4140.

EGM 5615 Synthesis of Engineering Mechanics (3). Unified approach to the analysis of continuous media using constitutive equations, mechanical behavior of materials and their usefulness in handling failure theories and composite materials. Prerequisites: MAP 2302 or EGM 3311, and EMA 3702.

EGM 5935 Review of Topics in Mechanical Engineering (4). To prepare qualified candidates to take the Mechanical Engineering PE written examination. Reviewed courses include: Thermodynamics, Fluid Mechanics, Mechanics of Materials, Mechanical Design and Heat Transfer.

EGN 1100 Introduction to Engineering (1). This course will provide a broad exposure, "birdseye" view of the engineering profession to entering freshmen.

EGN 1110C Engineering Drawing (3). Laboratory experiences in the principles and practice of idea development and expression through free hand sketching and conventional instrument drafting. A beginning course for students with no prior drafting experience.

EGN 3311 Statics (3). Forces on particles, and two and three dimensional rigid bodies, equilibrium of forces, moments, couples, centroids, section properties, and load analysis of structures; vector approach is utilized. Prerequisites: MAC 2312 and PHY 2048.

EGN 3321 Dynamics (3). Study of the motion of particles and rigid bodies, conservation of energy and momentum. A vector approach is utilized. Prerequisite: EGN 3311.

EGN 3343 Thermodynamics I (3). Fundamental concepts of basic thermodynamics including first and second law topics, equations of state and general thermodynamic relationships. Prerequisites: MAC 2312, PHY 2048, and CHM 1045.

EGN 3365 Materials in Engineering (3). A study of materials used in engineering. Includes atomic structure phase diagrams and reactions within solid materials. Prerequisite: CHM 1045.

EGN 5367 Industrial Materials and Engineering Design (3). Industrial materials, material selection, and

engineering design process, including synthesis, analysis, optimization, and evaluation.

EGN 5990 Fundamentals of Engineering (FE) Exam Review (4). Prepares upper level engineering students to take the Fundamentals of Engineering (FE) State Board Examinations. Reviews Chemistry, Engineering Economics, Statics, Dynamics, Electrical Circuits, Fluid Mechanics, Mechanics of Materials, Material Science and Thermodynamics.

EMA 3066 Polymer Science and Engineering (3). Introduction to molecular structure; property relationships; preparation, processing and applications of macromolecular materials. Prerequisite: EGN 3365.

EMA 3702 Mechanics and Materials Science (3). A mid-level course addressing the selection of engineering materials based on static and dynamic loadings, environmental analysis and the experimental analysis of mechanical systems. Emphasis on metals and composite materials. Prerequisite: EGN 3311.

EMA 3702L Mechanics and Materials Science Lab (1). Introduction to measurements of basic mechanical properties of materials. Experiments including tension, bending, torsion, fatigue, buckling, strain, and stress visualization. Prerequisite: EGN 3311. Corequisite: EMA 3702.

EMA 4121 Physical Metallurgy (3). Correlation of properties; structural, mechanical, and thermal history and service behavior of various metals and their alloys. Prerequisite: EGN 3365.

EMA 4121L Materials Laboratory (1). Laboratory techniques in materials, including metallography, mechanical testing, heat treatment and nondestructive testing techniques. Prerequisite: EGN 3365.

EMA 4223 Mechanical Metallurgy (3). Fundamentals of plastic deformation of crystalline solids: elementary theory of statics and dynamics of dislocations; applications to deformation of single crystals and polycrystals; fracture of metals. Prerequisites: EGN 3365 and EMA 3702.

EMA 5295 Principles of Composite Materials (3). The mechanical behavior of composite materials used in the automotive, aircraft and sporting goods industries. Material and laminar properties; design of composites; failure analysis; and environmental effects. Prerequisite: EGM 5615 or permission of the instructor.

EMA 5507C Analytical Techniques of Materials Sciences (3). Fundamental theories and techniques of the analytical methods for materials including: X-ray diffraction, scanning and transmission electron microscopy, thermal and surface analysis, and vacuum systems. Prerequisite: EGN 3365.

EMA 5584 Biomaterials Science (3). Materials used in prostheses for skin and soft tissue, vascular implant devices, bone repair, and artificial joints. Structure-property relationships for biological tissue. Prerequisites: EGN 3365, and EMA 3702.

EMA 5935 Advanced Topics in Materials Engineering (3). Topics include thermodynamics of solids, principles of physical metallurgy, including phase transformation and diffusion and analytical methods in materials engineering. Prerequisites: EGM 3343 and EGN 3365.

EMC 5415 Digital Control of Mechanical Systems (3). Discrete modeling of mechanical systems. Digital feedback with emphasis on hydraulic, pneumatic and electromechanical devices. Prerequisite: EML 4312.

EML 2030 Software for Mechanical Design (3). Students will use software to develop solid models and a mathematical software package to solve mechanical engineering problems. A programming language will be used to define input parameters. Prerequisite: EGN 1100 or EML 3006, Corequisite: MAC 2313.

EML 3006 Concepts of Engineering (1). Provide a broad exposure, "Birdseye" view of the engineering profession to junior and senior transfer students. To be completed within two terms after admission to the ME program.

EML 3101 Thermodynamics II (3). Continuation of Thermodynamics I covering reactive and nonreactive mixtures and various thermodynamic cycles. Prerequisite: EGN 3343.

EML 3126 Transport Phenomena (3). Fundamental principles of transport phenomena; Governing Equations; Compressible Flow. Prerequisite: EGN 3321 or EGN 3343, and MAP 2302 or EGM 3311.

EML 3126L Transport Phenomena Laboratory (1). Experiments illustrating the principles of transport phenomena: wind tunnel, shock tubes, airfoils. Prerequisite: EGN 3321.

EML 3222 System Dynamics (3). Introduction to modeling of mechanical systems; derivation of system equations and response of fluid, thermal, and vibrational systems. Available solution methods will be discussed. Prerequisites: EGN 3321, EMA 3702, CGS 2420 or CGS 2423 or EML 2030.

EML 3262 Kinematics and Mechanism Design (3). Fundamentals of kinematics and mechanism design; study of the mechanisms used in machinery and analysis of their motion. Two and three dimensional analytical and numerical methods of computer application. Design is emphasized. Prerequisites: EGN 3321 and CGS 2420, or EML 2030 or CGS 2423.

EML 3301C Instrumentation (3). A practical study of common instrumentation techniques. The use of instrumentation and measurement methods to solve problems is emphasized. Prerequisite: EEL 3003 or EEL 3111.

EML 3301L Instrumentation and Measurement Laboratory (1). A practical study of common instrumentation elements and measurement systems used in mechanical and electro-mechanical applications. Prerequisites: EEL 3111L.

EML 3450 Energy Systems (3). Review of theory and engineering aspects of conventional energy conversion systems, fuels and combustion, fossil fuels, and nuclear power plants. Aspects of direct energy conversion. Prerequisite: EML 3101.

EML 3500 Mechanical Design I (3). Design of basic machine members including shafts, springs, belts, clutches, chains, etc., Prerequisites: EGN 3321, EMA 3702, and EGN 3365.

EML 4140 Heat Transfer (3). Study of the fundamentals of heat transfer including conduction, convection, and radiation. Computer applications and design problems emphasized. Prerequisites: CGS 2420 or CGS 2423, EGN 3343 or EML 2030, EML 3126, and MAP 2302 or EGM 3311.

EML 4220 Mechanical Vibrations (3). Theory and application of mechanical vibrations. Includes damped and undamped vibrations with

one or more degrees of freedom computer methods emphasized. Prerequisites: EGN 3321, EMA 3702, and EML 2030 or CGS 2420 or CGS 2423.

EML 4246 Tribological Design for Machines and Elements (3). Introduction to friction and wear, analysis of tribological systems, and applications of Tribological Principles to machine and machine element design. Prerequisites: EML 4501 or permission of the instructor.

EML 4260 Dynamics of Machinery (3). Acceleration and force analysis of reciprocating and rotating mechanisms and machines. Dynamic balancing of idealized systems. Torsional and lateral critical speeds of a rotor and self-excited instability. Prerequisite: EML 3262.

EML 4312 Automatic Control Theory (3). Feedback control systems; stability analysis; graphical methods. Applica-tions with emphasis on hydraulic, pneumatic and electro-mechanical devices. Prerequisites: EGN 3321, MAP 2302 or EGM 3311, EML 2030 or CGS 2420 or CGS 2423.

EML 4410 Combustion Processes (3). Introduction to combustion processes, thermochemistry, chemical kinetics, laminar flame propagation, detonations and explosions, flammability and ignition, applications in IC engines and gas turbines. Prerequisite: EML 3101, EML 4140.

EML 4419 Propulsion Systems (3). Basics of air breathing and rocket engines used in flight systems, gas turbine and ramjet fundamentals. Introduction to compressor and turbine design. Propulsion performance. Unconventional means of propulsion in space. Prerequisites: EML 3101 and EML 3126.

EML 4421 Internal Combustion Engines (3). Engine types, characteristics and operation. Performance factors, fuel combustion, power cycles. Knock and engine variables. Exhaust emissions. Fuel Metering. Compressors and turbines. Prerequisite: EML 3101.

EML 4501 Mechanical Design II (3). Continuation of design analysis of elementary machine elements, including lubrication bearings, and gearings. Introduction to advanced analysis techniques. Prerequisite: EML 3500.

EML 4503 Production Machine Modeling and Design (3). The modeling of metal removing, forming, and polymer processing operations will be introduced. The design of production machines will be discussed based on the models. Prerequisites: EGN 3365, EMA 3702, and EIN 3390.

EML 4525 Mechanical Design Synthesis and Analysis (3). Applica-tion of an FEM software package to determine stress and deformation as well as temperature and heat flux in solid bodies subject to mechanical as well as thermal loads. Prerequisites: EML 2030 or CGS 2420 or CGS 2423, EML 4140 and EMA 3702.

EML 4535 Mechanical Computer Aided Design (3). Introduction to the use of computers in the design process. Course emphasizes the use of interactive computing and computer graphics in developing CAD applications. Programming project is required. Prerequisite: EML 2030.

EML 4561 Introduction to Electronic Packaging (3). Introduction to mechanical packaging of electronic systems. Integrates concepts in mechanical engineering to the packaging of electronic systems, such as hybrid microelectronics. Prerequisites: EEL 3003 or EEL 3111, and EEL 3111L.

EML 4585 Design of Biomedical Systems and Devices (3). Mechanical design and material choices of various biomedical systems and devices such as cardiovascular assist devices, total artificial heart, pulmonary assist devices, total hip prosthesis and other orthopaedic devices. Prerequisites: EGN 3365, EMA 3702, EML 3126 or permission of the instructor.

EML 4601 Refrigeration and Air Conditioning (3). Application of principles of Heating, Ventilation, Refrigeration, and Air Conditioning to design problems. Prerequisite: EML 3101 or permission of the instructor.

EML 4601L Refrigeration and Air Conditioning Lab (1). Experiments in Air Conditioning and Refrigeration applications. Corequisite: EML 4601.

EML 4603 Air Conditioning Design (3). Psychrometry comfort; mechanical refrigeration; heat pumps, load calculations; cooling coil performance; heating and humidification; distribution duct and fan design. Prerequisites: EML 3101 and EML 4140 or permission of the instructor.

EML 4608C Mechanical Systems in Environmental Control (3). Analysis of refrigeration, heating and air distribution systems. Synthesis of environmental control systems. Prerequisite: EML 3101.

EML 4702 Fluid Dynamics (3). A mid-level course on ideal fluid flow, compressible flow and viscous flow. Analysis and numerical techniques of continuity and Navier-Stokes equation for incompressible and compressible flow. Prerequisite: EML 3126.

EML 4706 Design of Thermal and Fluid Systems (3). Design of thermal and fluid systems and components. Piping networks, duct works. Selection of pumps and fittings. Basic design of heat exchangers, turbomachinery, pumps, and fans. Prerequisites: EML 3101 and EML 4140.

EML 4711 Gas Dynamics (3). Basic equations of motion for the flow of a compressible fluid, isentropic flow, normal and oblique shock waves, linearized flows method of characteristics and supersonic thin-air foil theory. Prerequisites: EML 3126 and EGN 3343.

EML 4804 Introduction to Mechatronics (3). This course will introduce computer controlled precise motion generation in smart machines. Prerequisite: EML 3301L.

EML 4806 Modeling and Control of Robots (3). Robot models in terms of geometric parameters. Kinematic and dynamic modeling of robots. Static and dynamic force equilibrium. Robot programming, control algorithms, simulations. Prerequisites: EML 3262.

EML 4823 Introduction to Sensors and Signal Processing (3). This course will introduce the basic sensors and signal processing techniques for design and development of smart products. Prerequisite: EML 3301L.

EML 4905 Senior Design Project (3). Project course introducing methods of research; a survey, analysis, or apparatus project in mechanical engineering or research on a current problem in engineering. Prerequisite: EML 3301L and permission of the advisor. Corequisites: EML 4501, EML 4706.

EML 4906L Mechanical Lab (1). Experiments with various types of mechanical equipment including engines, fans, boilers, pumps, motions and mechanics. Prerequisites: EGN 3343 and EML 3126.

EML 4930 Special Topics/Projects (1-3). Individual conferences, assigned readings, and reports on independent investigations selected by the students and professor with approval of advisor.

EML 4949 Co-op Work Experience (3). Supervised full-time work experience in engineering field. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.

EML 5103 Intermediate Thermo Dynamics (3). Thermodynamic approach to processes and engines; alternative formulations and legendre transformations; maxwell relations, first and second order phase transitions. Prerequisite: EML 3101.

EML 5104 Classical Thermodynamics (3). Mathematical analysis of the laws of classical reversible and irreversible thermodynamics. Applications to mechanical, electro- magnetic, and chemical systems. Prerequisite: EML 3101.

EML 5125 Classical Dynamics (3). Kinematics of rigid body motion, Eulerian angles, lagrangian equations of motion, inertia tensor, momental ellipsoid. Rigid-body equations of motion, Euler's equations, force-free motion, polhade and herpolhade, theory of tops and gyroscopes. Variational principles. Hamiltonian equations of motion. Poinsote representation. Prerequisites: MAP 2302 or EGM 3311, and EGN 3321.

EML 5152 Intermediate Heat Transfer (3). Multi-dimensional heat conduction under steady and transient conditions. Heat, mass and momentum transfer. Radiation heat transfer. Gas radiation. Free and forced convection. Prerequisites: EML 4140.

EML 5385 Identification Techniques of Mechanical Systems (3). FFT, time series analysis and neural networks are introduced. Applications of these techniques are discussed for identification of mechanical structures and machine diagnostics. Prerequisite: EML 4312.

EML 5509 Mechanical Design Optimization (3). Finite element analysis and sensitivity analysis combined with numerical optimization techniques to optimize the design. Prerequisite: EGM 5354 or permission of the instructor.

EML 5505 Smart Machine Design and Development (3). Design of indepen-dently operating smart electromechan-ical systems (most consumer products) which monitor their environment, give decisions, and create motion. Prerequisites: EML 4312 or consent of the instructor.

EML 5514 Aerodynamics and Flight Mechanics (3). Fundamentals of aerodynamics, definition of aerodynamic shapes, analysis of aerodynamic forces, airplane performance, and flight stability and control. Prerequisites: EGN 3321, EML 3126, EGN 3343.

EML 5519 Fault-Tolerant System Design (3). Fault tolerance in mechanical, manufacturing, computer, and aerospace systems. Basic stages of fault isolation. Fault tolerance measures, architectures, and mechanical system design methodologies. Prerequisite: EML 3500.

EML 5528 Digital Control of Mechanical Systems (3). Discrete modeling of mechanical systems. Digital feedback systems. Computer interface of mechanical systems. Controller design with emphasis on hydraulic, pneumatic and electromechanical devices. Prerequisite: Permission of the instructor.

EML 5530 Intermediate Computer-Aided Design/Computer-Aided Engineering (3). Computer-aided geometrical modeling of spatial mechanical systems. Design criteria and analytical approaches for planer kinematic systems will be emphasized. Prerequisites: EML 4535 or permission of the instructor.

EML 5562 Advanced Electronic Packaging (3). Advanced topics in electronic packaging. Evaluation of first through fourth level assembly. Applications of computer layout design, thermal management and mechanical stability analysis. Prerequisite: EML 4561 or permission of the instructor.

EML 5599 Heat Pipe Theory and Applications (3). Heat pipe theory, heat pipe design and its applications, especially in the areas of energy conversion and conservation. Prerequisites: EML 3101 and EML 4140.

EML 5606C Advanced Refrigeration and Air Conditioning Systems (3). The various methods used in the thermal design and analysis of both refrigeration and heat pump systems are investigated. Various methods of producing heating and cooling are examined including vapor compression, absorption, air cycle, steam jet, thermoelectric, solar heating and cooling systems. Prerequisite: EML 4601.

EML 5615C Computer-Aided Design in Air Conditioning (3). Software will be used to demonstrate heating, ventilating and air conditioning design concepts and sizing equipment & determining performance parameters. Project design is required. Prerequisites: EML 2030 or CGS 2420 or CGS 2423, and EML 4601.

EML 5708 Advanced Design of Thermal and Fluid Systems (3). Advanced designs of pumps, compressors, heat exchangers, HVAC systems and thermal and fluid control devices. Prerequisite: EML 4706.

EML 5709 Intermediate Fluid Mechanics (3). Basic concepts and scope of fluid dynamics; non-inertial reference frames. Two-dimensional potential theory. Applications to airfoils. The Navier-Stokes equations; selected exact and approximate equations. Prerequisite: EML 3126.

EML 5748 Boundary Layer Theory (3). Advanced fluid dynamic analysis of the Navier - Stokes equations, using boundary layer assumptions. Focus will be on solutions of thermal and fluid boundary layers. Prerequisite: EML 3126.

EML 5808 Control Technology for Robotic Systems (3). State-space equations of robots. Controller design based on linearization, nonlinearity cancellation, optimal control, adaptive control, and other methods. Stability analysis, performance comparison. Prerequisites: EGN 3321, EML 4312, or equivalent.

EML 5825 Sensors and Applied Machine Intelligence (3). Sensors, signal analysis techniques, and error compensation methods will be introduced for machine intelligence. Prerequisites: EML 4312, Production Machine Modeling and Design, or equivalent, or permission of the instructor.

Construction Management

Jose D. Mitrani, P.E., *Associate Professor and Chairperson*
Kenneth H. Carpenter, *Associate Professor*
Bhaskar Chaudhari, P.E., *Professor*
John M. Dye, *Instructor*
Eugene D. Farmer, A.I.A., *Associate Professor*
Zeljko M. Torbica, *Assistant Professor*

Bachelor of Science in Construction Management

Degree Program Hours: 126

The undergraduate program in Construction Management is nationally accredited by the American Council for Construction Education. Its goal is to provide students with the knowledge and skills required for entry level supervisory or managerial positions in the construction industry. Graduates usually find employment as construction superintendents, project managers, project schedulers, cost estimators, quality controllers or in managing their own construction businesses.

Opportunities for employment or advancement exist in all areas of the construction industry including land development, home building, public building, industrialized building systems, commercial, industrial, marine and heavy construction, underwater and space age facilities, material and equipment sales and installations, and construction product research, development and sales.

Honorary and Professional Organizations

Sigma Lambda Chi: Sigma Lambda Chi is the national honorary society for students in Construction. The purpose of Sigma Lambda Chi is to recognize students in Construction Management for outstanding scholastic achievement. The organization provides a service to the students by inviting guest lecturers, sponsoring student tutoring and undertaking a variety of service projects.

Student Chapter of the Associated General Contractors of America: The AGC is a national student organization sponsored by the Associated General Contractors. Its purpose is to increase student awareness of the construction industry, promote fellowship and professionalism and to provide service to the Department, University and Community. Membership is open to all Construction related majors. Activities include sponsoring guest lecturers, attendance at local, regional and national A.G.C. meetings and conferences, and undertaking a variety of service projects.

Student Chapter of the National Association of Women in Construction: This national student organization is sponsored by the National Association of Women in Construction. Its purpose is to promote knowledge of the construction industry and fellowship within the student body. Activities include monthly meetings with guest lecturers, field trips and a variety of service projects. The FIU student chapter of NAWIC was the first such chapter established in the United States. Membership is open to all construction related majors.

Program of Study

The four year program leading to a Bachelor of Science in Construction Management is for students who are interested in preparing for professional careers in construction management, techniques, operations, and related areas in the construction industry.

The Lower Division Core Courses, i.e. Freshman and Sophomore levels, are designed to provide easy transfer for community college graduates. With proper planning, transfer students with an A.A. degree may be able to complete the four year degree program in four remaining semesters at the University. Prospective community college transfer students should contact an advisor for program information and Lower Division transfer requirements prior to enrolling at FIU.

Students already working full time, many with trades or construction licenses, are generally able to plan their program around job commitments and responsibilities. Faculty advisors are on hand days and evenings to assist students in course selection and scheduling. Course offerings are generally rotated to serve daytime, evening, and weekend students.

Admission

The Department of Construction Management encourages applications for admission from qualified students of both sexes, from all cultural, racial, religious or ethnic groups. It should be understood that minimum requirements have been established and that admission to the Department is a selective process.

Grade Point Average

Admission into the undergraduate program requires a minimum 2.0 grade point average. Students transferring from another university or community college should review the Florida International University Undergraduate Catalog for university policies, application procedures, and financial aid information. Transfer students must also contact a Construction Management advisor to review transcripts and determine allowable transfer credits.

Transfer Credits

No grade below a 'C' shall be acceptable for transfer into the program. Lower Division courses (courses at the 1000 or 2000 level) designated as equivalent by the statewide course numbering system will be accepted by the Department as fulfilling the Upper Division requirements. Credits from these Lower Division courses may be used to offset Upper Division core credit requirements. Other 1000 and 2000 level courses designated as equivalent by the department advisor may be accepted by the Department as fulfilling Upper Division requirements. When equivalent Lower Division courses are used to fulfill Upper Division course requirements a student will be required to complete an equal number of 3000 level (or above) credits from approved Departmental electives. Extra credits above the 60 semester credit hours required for admission into the Construction Management program will not reduce the number of credit hours to be completed in the Upper Division, including electives, to earn a degree and may not be accepted for equivalent credit in Upper Division.

Core and General Education Requirements

Students entering the university with less than 36 semester credit hours will be required to meet the requirements of the University Core Curriculum, in addition to the Department Lower Division Core. Students entering the university with more than 36 semester credit hours will be required to meet the University General Education requirements, in addition to the Department Lower Division Core.

Non Degree-Seeking

Students wishing to enroll in courses during the application process may do so as a non-degree seeking. Students must consult an advisor for approval

and complete a non-degree seeking enrollment waiver. Without this waiver and advisor approval, there is no guarantee that the courses taken will be accepted for graduation. No more than 15 semester credits of work taken as a non-degree seeking can be applied towards graduation. Students may take courses under the non-degree seeking designation for one semester only.

General Regulations

Normal Loads

Students taking a minimum of 12 semester credit hours per semester are considered full time students. Students taking under 12 hours are considered part time and should be aware that certain university privileges and benefits may not be applicable to part time students. Students are not recommended to take excessive loads. Special exceptions may be made, at the option of the Department, in the case of students with a grade point average of 3.0 or greater. Students that meet this criteria wishing to take over 18 semester credit hours must have the approval of both the Chairperson of the Department and the Dean of the College of Engineering and Design, prior to registering for an overload.

Grades

The Department of Construction Management requires a minimum grade of 'C' or better in all Lower Division and Upper Division core courses and electives.

Grade of Incomplete

A grade of 'I' (Incomplete) may be granted, at the option of the Instructor and the Department Chairperson, to a student who, due to serious, documented, and verifiable extenuating circumstances beyond his/her control (such as an illness requiring hospitalization) is unable to complete the work required to obtain a grade for a course. In no case shall a grade of 'I' be granted to a student because he/she is not passing a course and desires additional time to attempt to obtain a passing grade. A student granted a grade of 'I' must complete the work deemed by the Instructor necessary to complete the course no later than two semesters after the grade was assigned to the student, or the grade shall automatically revert to a grade of 'F' (failing grade).

Independent Study

Students who wish to enroll in an independent study course must have the prior written approval of both the instructor and the Department Chairperson the semester prior to registering. Independent Study courses can not be substituted for required Lower or Upper Division departmental core courses or for elective courses.

Credit By Examination

The Department does not generally offer credit by examination for required Lower or Upper Division departmental core courses or electives. A student with outstanding, exceptional and documented skills in a particular subject as well as an outstanding academic record may request credit by examination, and it is the option of the Department Faculty and the Department Chairperson whether to grant the request.

Credit For Non-College Learning

The Department does not award credit for non-college learning (life work experience).

Student Work

The Department reserves the right to retain any and all student work for the purposes of record, exhibition or instruction.

Normal Academic Progress

The student will have maintained normal academic progress when the student earns a minimum grade point average of 2.0 for all work attempted.

Course Sequence and Prerequisites

Course prerequisites are clearly indicated on the Undergraduate Program sheets, available in the Department office. It is the student's responsibility, not the advisor's, to ascertain that required prerequisites have been taken and passed prior to registering for a course. Failure to comply with prerequisite requirements may result in the student being dropped from or failed in a class without prior warning from the instructor.

Probation or Dismissal

Students who do not make satisfactory academic progress may be excluded from further registration.

Class Attendance

Class attendance may be required and may be used for grade determination at the option of the instructor.

Graduation

In order to be eligible to graduate the student must meet all University and Departmental requirements. The program of studies consists of a minimum of 63 Lower Division semester credit hours and 63 Upper Division semester credit hours for a minimum total of 126 semester credit hours. The waiving of any required course shall not reduce the minimum of 126 semester credit hours required for graduation. A student must have successfully completed the University Core Curriculum (for those students that entered the program having completed less than 48 semester credit hours) or the University General Education Requirements (for those students that entered the program having completed more than 48 semester credit hours) with minimum acceptable grades as determined by Undergraduate Studies (see catalog for additional information). In addition, all Lower Division and Upper Division Construction Management Core courses and electives must be completed with a grade of 'C' or better. In order to graduate a student must also have a minimum grade point average of 2.0, have successfully completed all portions of the CLAST test, and have met the foreign language requirement.

Students should contact an advisor at least one semester prior to their projected graduation and request a review of his or her file. At the start of the final semester the student is required to complete and have his advisor approve an Application for Graduation, available from the Department. (See catalog for additional information on graduation procedures and scheduling.) If for any reason a student fails to graduate in the semester after applying for graduation, that student must reapply for graduation.

It is the student's responsibility, not his/her advisor's responsibility, to ascertain that all requirements for graduation, as stated in the University Catalog and in the Department Program sheets, have been met.

Foreign Language Requirement

Students must meet the University Foreign Language Requirement. Refer to the appropriate sections in the Catalog's General Information for Admission and Registration and Records.

Undergraduate Curriculum

The following courses comprise the undergraduate curriculum leading to a degree of Bachelor of Science in Construction Management. Courses numbered 'I' shall be taken before courses numbered 'II'. Some credits of

the Lower Division Core can be used to satisfy University Core or General Education requirements. Those courses designated by a (4) are Departmental Lower Division Core courses. All Upper Division courses are considered Departmental Upper Division Core courses.

Departmental Lower Division Courses

English Composition[1]		6
Mathematics[1]		6
Sciences[1]		8
Historical Foundations/Critical Inquiry[1]		
Comparative Cultures/Gender Studies[1]		3
Social Science[1]		3
Arts or Modern Language[1]		3
Freshman Experience[1]		1
GLY 1010	Physical Geology[3]	3
GLY 1010L	Physical Geology Laboratory[3]	1
BCN 1252	Building Construction Drawing I[3]	4
BCN 2210	Construction Materials[3]	3
BCN 2256	Building Construction Drawing II[3]	4
BCN 2402	Structural Design I[3]	3
BUL 4320	Business Law I[3]	3
MAC 2233	Calculus For Business[3]	3
PHY 2053	Physics without Calculus[3]	4
PHY 2048L	Physics Laboratory[3]	1
COP 2172	Programming in Basic[3]	3
ECO 2013	Principles of Macroeconomics[3]	3
	or	
ECO 2023	Principles of Microeconomics[3]	3
ACG 3024	Accounting For Managers[3]	3
STA 2023	Statistics for Business and Economics[3]	3
BCN 2281	Construction Surveying[3]	3

Upper Division Courses

BCN 3002	Principles of Construction Management	3
BCN 3730	Construction Safety	3
BCN 3740	Legal Aspects of Construction	3
BCN 3762	Building Codes and Quality Control	3
BCN 4461	Structural Design II	3
BCN 4462	Structural Design III	3
BCN 3611	Construction Cost Estimating I	3
BCN 4612	Construction Cost Estimating II	3
BCN 3720	Construction Scheduling I	3
BCN 4724	Construction Scheduling II	3
EIN 3354	Engineering Economy	3
BCN 3640	Economic Planning for Construction	3
BCN 3753	Financial Management of Construction Organizations	3
BCN 3727	Construction Sitework	3
BCN 4465	Temporary Structure in Construction	3
BCN 4561	Environmental Control in Buildings I	3
BCN 4564	Environmental Control in Buildings II	3
BCN 3703	Management of Construction Projects	3
BCN 4910	Senior Project 6	3
Business Elective[2]		3

[1]Consult the Core Curriculum Section for approved courses to satisfy these requirements

[2]Consult the Department of Construction Management advisor for approved courses to satisfy these requirements

[3]Departmental Lower Division Core Course

Business-Management Electives

One 3,000 or 4,000 level 3 credit business/management elective, selected in consultation with the undergraduate advisor of the department.

Sample Program of Study

The following is a sample program of study for a student seeking to earn a degree of Bachelor of Science in Construction Management. This program of study assumes the student has successfully completed MAC 2132 (Pre-Calculus Mathematics) or its equivalent prior to enrolling for his/her first semester of study at FIU. It also assumes that the student enters FIU with less than 36 credits and without meeting the foreign language requirement. The reader is reminded that all students entering a university in the State University System with fewer than 60 credit hours are required to earn at least nine credit hours prior to graduation by attending one or more summer terms at a state university.

Bachelor of Science in Construction Management

Degree Program Hours: 126

Undergraduate Program

The following analysis assumes that the student enters the university from high school or with less than 36 credits and no foreign language experience.

First Semester: (18)

ENC 1101	Elements of Writing	3
MAC 2233	Calculus For Business	3
GLY 1010	Physical Geology	3
GLY 1010L	Geology Lab I	
BCN 1252	Building Construction Drawing I	4
BCN 3002	Introduction to Construction Management	3
SLS 1501	Freshman Experience	1

Second Semester: (18)

ENC 1102	Literary Analysis	3
STA 2023	Statistics for Business and Economics	3
PHY 2053	Physics w/o Calculus	4
PHY 2048L	Physics Lab	1
BCN 2256	Building Construction Drawing II	4
ECO 2013	Principles of Macroeconomics	3
	or	
ECO 2023	Principles of Microeconomics	3

Third Semester: (15)

Foreign Language		
Historical Foundations		3
Arts		3
BCN 2210	Construction Materials	3
COP 2172	Programming in Basic	3
BCN 3240	Construction Equipment	3

Fourth Semester: (15)

Foreign Language		
Critical Inquiry		3
Comparative Culture and Gender Studies		3
ACG 3024	Accounting for Managers	3
BCN 2281	Construction Surveying	3
EIN 3354	Engineering Economy	3

Fifth Semester: (15)

BUL 4320	Business Law	3
BCN 3727	Construction Sitework	3
BCN 2402	Structural Design I	3
BCN 3611	Construction Estimating I	3
BCN 3730	Construction Safety	3

Sixth Semester: (18)

BCN 3762	Building Codes and Quality Control	3
BCN 3720	Construction Scheduling I	3
BCN 3740	Legal Aspects of Construction	3
BCN 4612	Construction Estimating II	3
BCN 4461	Structural Design II	3
BCN 4462	Structural Design III	3

Seventh Semester: (15)

BCN 3640	Economic Planning for Construction	3
BCN 4561	Environmental Control I	3
BCN 4724	Construction Scheduling II	3
BCN 4465	Temporary Structures	3

BCN 3703	Management of Construction Projects	3

Eighth Semester: (12)

BCN 3753	Financial Management of Construction Organizations	3
BCN 4564	Environmental Control II	3
BCN 4910	Senior Project	3
Upper Division Business Elective[2]		3

Course Descriptions

Definition of Prefixes

BCN-Construction.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

BCN 1252 Building Construction Drawing I (4). The laboratory application of Methods and Materials of Construction I. Students prepare plans, elevations, sections, and details appropriate to light construction. (F)

BCN 2210C Construction Materials (3). A study of the origins, production and uses of construction materials such as concrete, steel, aluminum, wood, brick, and stone. A combination of structural and non-structural, interior and exterior materials and assemblies will be examined.

BCN 2256C Building Construction Drawing II (4). The laboratory application of Methods and Materials of Construction II. Students prepare plans, elevations, sections, and details appropriate to general construction. Prerequisite: BCN 1252 and BCN 1002. (S)

BCN 2281 Construction Surveying (3). Principles and practices of surveying as it applies to building construction. Prerequisite: Trigonometry. (S)

BCN 2402C Structural Design I (3). Applications of the principles of mechanics to engineering problems of equilibrium, strength, and stiffness. Topics include equilibrium of forces, stress, strain, torsion, beams, and columns. Prerequisites: PHY 2053, 3043L, and MAC 2132. (F)

BCN 3002 Principles of Construction Management (3). A course covering the history of the construction industry with emphasis on the principles of construction management. (F)

BCN 3240 Construction Equipment (3). Methods, procedures, and equipment used in residential, commercial, and heavy construction. Equipping the construction plant. Production value analysis. Work effectiveness studies. Prerequisite: MAC 2132 or equivalent. (F)

BCN 3611 Construction Cost Estimating I (3). Principles and practices of estimating providing application and drill in surveying quantities of labor and materials for general construction projects: excavation, concrete and formwork, carpentry, masonry, structural steel, lath and plaster, interior finishes. Prerequisites: ARC 1461 and BCN 2256. (F)

BCN 3640 Economic Planning for Construction (3). Nature of construction costs, funding sources and arrangements, capital requirements, bonding, insurance, risk and contingency evaluation, general office operations, and bidding procedures. Prerequisites: MAC 2132 and EIN 3354, or equivalent. (F)

BCN 3703 Management of Construction Projects (3). Organization and management theory elements of leadership and human supervision, organization, office operations, labor relations, safety, and work improvement, as they relate to project field operations. Prerequisites: BCN 3762 BCN 3740, BCN 3730, and senior level standing. (F)

BCN 3720 Construction Scheduling I (3). The application of the Critical Path Method and Program Evaluation Review Technique to construction planning, scheduled vs. actual job expenditures. Cost forecasting. Development of unit prices from field data. Laboratory is included, which consists of computer applications. Prerequisite: MAC 2132. (F)

BCN 3727 Construction Sitework (3). Exposition and critical analysis of practical and sequential aspects of converting raw land to finished product. Course will define various steps and discuss techniques of accomplishment. Prerequisites: BCN 3240, GLY 1010, and BCN 2256. (F)

BCN 3730 Construction Safety (3). Introduces occupational safety hazards associated with the construction industry. Emphasis placed on recognition, evaluation, and control of safety hazards particularly as they relate to the Occupational Safety and Health Act. Prerequisite: Introduction to Construction Management. (F)

BCN 3740 Legal Aspects of Construction (3). Legal and business aspects of engineering contracts and specifications in the construction industry. Analysis, study of precedents, and application of contract clauses, including changes, changed conditions, termination, disputes, payments, risk and insurance, inspection, liquidated damages, and technical requirements. Prerequisites: BUL 4320 and Introduction to Construction Management. (S)

BCN 3753 Financial Management of Construction Organizations (3). Accounting for construction operations; labor, materials, equipment, and overhead costs. Money management, depreciation, taxes, loans, profit/losses analysis. Prerequisite: ACG 3024 or equivalent. (S)

BCN 3761 Specifications Writing (4). Study of methodology for acquisition of information and transmission of technical and legal requirements for construction projects. Preparation of outline specifications, building description, and purchasing specifications. Problems of format, reviewing, and updating. Prerequisites: ARC 3463, BCN 3257, BCN 3762 and BCN 3740 or consent of instructor.

BCN 3762 Building Codes and Quality Control (3). Study of building codes required by local, county, and state levels and their relation to quality control. Prerequisite: BCN 1002 and ARC 1461. (S)

BCN 4260 Quality Control in Construction (3). Quality control as governed by the job inspector, contractor superintendent, architect-engineer, building official, and governmental agencies and requirements. Prerequisite: BCN 3762 or equivalent.

BCN 4461C Structural Design 2 (3). An introduction to the material properties, allowable stresses, applicable codes and standards for the design of timber and steel structures. Prerequisite: BCN 2402C. (S)

BCN 4462C Structural Design 3 (3). An introduction to the material properties, allowable stresses, applicable codes and standards for the design of reinforced concrete structures. Prerequisite: BCN 2402. (S)

BCN 4465 Temporary Structures in Construction (3). The course will present the theory and practice of the planning, erection, procedures, and maintenance of temporary structures that are used in the performance of construction operations. Prerequisites: BCN 4461, BCN 3730, and BCN 4462. (F)

BCN 4561C Environmental Control in Buildings I (4). A study of concepts and systems for providing optimum thermal, lighting, plumbing, and acoustical conditions, in both commercial and residential buildings. Prerequisites: Physics. (F)

BCN 4564 Environmental Control in Buildings II (3). Concepts and practices of electrical systems in the construction of residential and commercial buildings, including code provisions and cost estimates. Prerequisite: MAC 2132. (S)

BCN 4612 Construction Cost Estimating II (3). Quantity take-offs and pricing, marketing policies and the application of microcomputers in construction estimating. Prerequisites: BCN 3240, BCN 3611 and BCN 3727. (S)

BCN 4724 Construction Scheduling II (3). The application of advanced computerized planning, scheduling, and simulation techniques to construction operations, processes, and control. Prerequisites: BCN 3720 and BCN 3611. (S)

BCN 4906 Special Topics (3). For a group of students who wish an intensive study of a topic not otherwise offered in the University. Prerequisite: Permission of the instructor.

BCN 4905 Directed Independent Studies (VAR). Specialized intensive study in an area of special interest to the student. Prerequisite: Permission of the instructor.

BCN 4910 Senior Project (3). This course requires the senior level construction management student to work on a project designed to integrate the knowledge acquired in multiple topics within the undergraduate curriculum. Prerequisites: BCN 4465, BCN 4724, and BCN 4703. (S)

College of Engineering

Dean **Gordon R. Hopkins**
Associate Dean for Academic Program **James R. Story**
Associate Dean for External Programs **Gustavo A. Roig**
Associate Dean **Sushil Gupta**
Assistant Dean **Lourdes A. Meneses**
Development Officer **Zully Dorr**
Chairperson, Civil and Environmental Engineering **L. David Shen**
Chairperson, Construction Management **Jose D. Mitrani**
Acting Chairperson, Electrical and Computer Engineering **Malek Adjouadi**
Chairperson, Industrial and Systems Engineering **Shih-Ming Lee**
Chairperson, Mechanical Engineering **Richard K. Irey**
Director, Lehman Center for Transportation Research **L. David Shen**
Director, Hemispheric Center for Environmental Technology **M. Ali Ebadian**
Director, Water Research Center **Berrin Tansel**

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Wunnava, Subbarao V., Ph.D., P.E. *(Andhra University), Professor, Electrical and Computer Engineering*

Yen, Kang K., Ph.D. *(Vanderbilt University), Professor, Electrical and Computer Engineering*

Yih, Tachung, Ph.D. *(Catholic University of America) Professor, Mechanical Engineering*

Zhao, Fang, Ph.D., P.E. *(Carnegie Mellon University), Associate Professor, Civil and Environmental Engineering*

College of Health Sciences

College of Health Sciences

DeLois P. Weekes, *Dean*
Evelyn B. Enrione, *Associate Dean*
Marta M. Medina, *Assistant Dean*
Ayanna Amerigo, *Assistant Dean*
Marie-Luise Friedmann, *Research Director*

The College of Health Sciences offers programs of professional study in select health professions. The academic departments of the College offer courses of study leading to a baccalaureate degree in Dietetics and Nutrition, Health Information Management, Medical Laboratory Sciences, Nursing, and Occupational Therapy. Masters degrees are offered in Dietetics and Nutrition, Medical Laboratory Science, Nursing, Occupa-tional Therapy, Physical Therapy, and Public Health. A Doctor of Philosophy is offered by Dietetics and Nutrition. All degree programs are appropriately accredited by their respective professional accrediting bodies.

Applicants to the College must submit an Application for Admission to the University and must follow regular University procedures. Applicants must be eligible for admission to the University before being admitted to any degree program. Because several of the College's programs have been classified as limited access programs, students interested in admission to any program in the College should contact the department for specific prerequisites and admission requirements. Specialized admission procedures are required for the Dietetics Programs, Medical Laboratory Science, Nursing, Occupational Therapy, and Physical Therapy.

The goals of the College of Health Sciences are to:

1. Prepare health professionals at the undergraduate and graduate levels.
2. Promote close articulation between the appropriate programs and the community clinical sites for the experimental learning of our students.
3. Increase the knowledge base of the health disciplines through research.
4. Provide service to the health professions at the local, regional, national and/or international levels.

Academic Support Services

For the College of Health Sciences, the Undergraduate Student Support Services are coordinated by the Assistant Deans. Academic support services are responsible for the coordination of academic advising and student service activities of the College. Student Support Services keep students informed about educational opportunities such as scholarships, tuition waivers, and campus resources; serves as a liaison between the academic departments and the student support services university wide; facilitates the registration and graduation process in order to make sure that the students adhere to the College's guidelines.

A student who has been accepted to a degree program in the College must consult an advisor prior to the first class enrollment. An advisor may be assigned by contacting the Chairperson of the Department in which an academic major is desired. Continued contact (at least once per semester) with the advisor is urged to review progress and select courses for each succeeding semester.

The College of Health Sciences was awarded the Health Sciences Recruitment and Retention Program, a federal grant. The program is designed to assist in the recruitment and retention of disadvantaged students in the allied health professions

Note: The programs, policies, requirements and regulations listed in this catalog are continually subject to review. In order to serve the needs of the University's various publics, and to respond to the mandates of the Florida Board of Regents and the Florida Legislature, changes may be made without advance notice. Please refer to the General Information section for the University's policies, requirements, and regulations.

Interdisciplinary Courses

The College of Health Sciences offers interdisciplinary courses open to all students in the university. The current courses being offered are:

HSC 1001C Perspectives of Health Science Professions (3). A study of public health issues, disease, preventive medicine and wellness as they relate to nutrition, medical laboratory sciences, physical and occupational therapy. Utilizes lab and field work.

HSC 3549 Clinical Physiology for Health Professionals (3). Clinical physiological aspects of homeostatic mechanisms, skin, muscle contraction, nervous system, gastrointestinal system, body temperature regulation and exercise physiology will be targeted toward the allied health student.

HSC 2100 Healthy Lifestyles through Wellness (3). A survey of wellness issues including preventive health care, substance abuse prevention, stress management, sexually transmitted diseases, psychological illness, nutrition and exercise.

HSC 3002 Introduction to Health Science Professions (3). Introduction to health care and health science professions in the US including history, delivery systems, financial and ethical issues. Students are required to complete a service learning project.

HSC 3579 Wellness of Women (3). Concepts relating to women's health, including sexuality, preventative health care, nutrition, exercise, reproductive diseases and the social/political health care of women.

HSC 4910 Introduction to Research Methods in the Health Sciences (3). Introduces the student to the research process in an inter-disciplinary, multi-disciplinary health sciences environment. Prerequisite: STA 2122, CGS 2060, and BSC 1010.

HSC 4910L Introduction to Research Methods in Health Sciences Lab (1). The course is designed to be consistant with the lecture material while at the same time providing each professional group the opportunity to learn to develop their specific professional materials for presentation. Prerequisite: BSC 1010, STA 2122, and CGS 2060; Corequisite: HSC 4910.

Dietetics and Nutrition

Michele Ciccazzo, *Associate Professor, Chairperson*
Katharine R. Curry, *Professor Emeritus*
Victoria Hammer Castellanos, *Assistant Professor, and Director, Didactic Program in Dietetics*
Zisca Dixon, *Associate Professor, and Director, Coordinated Program*
Penelope S. Easton, *Professor Emeritus*
Evelyn B. Enrione, *Associate Professor and Associate Dean*
Valerie George, *Assistant Professor*
Susan P. Himburg, *Professor*
Fatma Huffman, *Professor, Director of Graduate Programs*
Amy Jaffe, *Clinical Instructor, Director Dietetic Internship*
Marcia Magnus, *Associate Professor*
Dian Weddle, *Associate Professor*
Nancy S. Wellman, *Professor*

The Department offers a major leading to a baccalaureate degree in dietetics and nutrition, and courses in nutrition for interested students. The Department offers Master of Science and Doctor of Philosophy degrees in dietetics and nutrition. The undergraduate programs are designed to assist the student to gain basic practitioner knowledge and skills.

Bachelor of Science in Dietetics and Nutrition

Degree Program Hours: 132

Coordinated Program

The Coordinated Program (CP) is currently granted accredited status by the Commission on Accreditation-Approval for Dietetics Education of The American Dietetic Association, 216 W Jackson Blvd., Chicago, Illinois 60606-6995, (312) 899-4876. The program combines didactic requirements with supervised practicum experience. Graduates from the CP are eligible to sit for the National Registration Examination for Dietitians.

The student must make formal application to the program by March 1 before Fall admission. This special application form can be obtained from the department. Criteria for admission includes grades in prerequisite course work, work experience and letter of application. Students must enroll in the summer prior to Fall admission. Practicum courses are sequential and require two years to complete. Practicum experiences are available in several hospitals and other health agencies. Students must satisfactorily complete a written comprehensive exam to graduate from the program.

Costs of the program to students in addition to tuition and fees include: providing transportation to practicum sites, lab coats and professional attire, annual laboratory tests at the student health services clinic.

Students must receive a grade of 'C-' or higher in all courses in the department.

Common Prerequisites[1]

Lower Division Preparation

Students desiring to major in general dietetics and nutrition need the following FIU course equivalents in addition to completing the general education requirements:

APB 2170	Introductory Microbiology	3
APB 2170L	Introductory Microbiology Lab	1
BSC 1010	General Biology	3
CGS 2060	Introduction to Microcomputers	3
CHM 1045	General Chemistry I	4
CHM 1045L	General Chemistry I Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
CHM 2210	Organic Chemistry I	4
CHM 2210	Organic Chemistry I Lab	1
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1
	or	
CHM 2200 may substitute for CHM 2210 and 2211		
CHM 2200	Survey of Organic Chemistry	3
CHM 2200L	Survey of Organic Chemistry Lab	1
ECO 2013	Principles of Macroeconomics	3
HUN 2201	Principles of Nutrition	3
PSY 2020	Introduction to Psychology	3
MAC 1102	College Algebra	3
SYG 2000	Introduction to Sociology	3

[1]Prerequisites for the Coordinated Program. Didactic students may complete during program.
FIU undergraduates must have met all lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Basic computer literacy is expected.

Upper Division Program

Required Courses (72)

Junior Year

Summer Semester: (14)

DIE 3005	Orientation to Dietetics	1
DIE 3434	Nutrition Education	2
DIE 3434L	Nutrition Education Lab	1
FOS 3021	Fundamentals of Food	3
FOS 3021L	Fundamentals of Food Lab	1
HUN 4240	Nutrition and Biochemistry	3
	or	
BCH 3033	General Biochemistry	4
PCB 3702	Intermediate Physiology	3
	or	
HSC 3549	Clinical Physiology for Health Professionals	3

Fall Semester: (15)

DIE 3244	Medical Nutrition Therapy	3
DIE 3244L	Medical Nutrition Therapy Lab	1
DIE 3317	Dietetics in Community Health	3
DIE 3355	Dietetics in Community Health Practicum[1]	2
HUN 4241	Advanced Nutrition	3
HUN 4403	Life Cycle Nutrition	3

Spring Semester: (15)

DIE 4246	Clinical Nutrition	3
DIE 4277	Clinical Nutrition Practicum[1]	4
DIE 4435	Nutrition Counseling	3
DIE 4435L	Nutrition Counseling Lab	1
FOS 4041	Food Science	3
FOS 4041L	Food Science Lab	1

Summer Semester: (6)

DIE 3125	Management of Dietary Systems	3
FSS 3233C	Institutional Foodservice Production	3

Senior Year

Fall Semester: (10)

DIE 3175	Dietetic Management Practicum[1]	4
DIE 4365	Dietetic Management of Nutrition Programs	3
DIE 4564	Independent Senior Research in Dietetics	3

Spring Semester: (12)

DIE 4506	Seminar in Dietetics and Nutrition	3
DIE 4536	Advanced Practicum in Dietetics[1]	9
DIE 4963	Comprehensive Dietetic Examination	0

[1]These courses are open only to students in the Coordinated Program, must be taken concurrently with the related didactic courses, and must be

taken in the order listed. Clinical experiences are supervised by the course instructors and are located in hospitals, health agencies, and school food service programs.

Bachelor of Science in Dietetics and Nutrition

Degree Program Hour: 120

Didactic Program

The Didactic Program in Dietetics is currently granted approval status by the Commission on Accreditation/ Approval for Dietetics Education of The American Dietetic Association, 216 W Jackson Blvd., Chicago, Illinois 60606-6995, (312) 899-4876. Upon completion of this program, students may apply to an accredited dietetic internship program or an approved Preprofessional Practice Program to obtain the supervised practice experience required to become eligible to sit for the National Registration Examination for Dietitians.

To be admitted into the program, undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Students must receive a grade of 'C-' or higher in all courses in the department.

General Emphasis

Upper Division Program

Required Courses (60)

BCH 3033	General Biochemistry	4
	or	
HUN 4240	Nutrition and Biochemistry	3
DIE 3005	Orientation to Dietetics	1
DIE 3125	Management of Dietary Systems	3
DIE 3244	Medical Nutrition Therapy	3
DIE 3244L	Medical Nutrition Therapy Lab	1
DIE 3317	Dietetics in Community Health	3
DIE 3434	Nutrition Education	2
DIE 3434L	Nutrition Education Lab	1
DIE 4246	Clinical Nutrition	3
DIE 4246L	Clinical Nutrition Lab[1]	2
DIE 4365	Management of Nutrition Programs	3
DIE 4377	Applied Dietetic Management of Nutrition Programs[1]	2
DIE 4435	Nutrition Counseling	3
DIE 4435L	Nutrition Counseling Lab	1
DIE 4506	Senior Seminar	3
DIE 4564	Independent Senior Research in Dietetics	3
DIE 4963	Comprehensive Dietetic Examination	0
FOS 3021	Fundamentals of Food	3
FOS 3021L	Fundamentals of Food Lab	1
PCB 3702	Intermediate Physiology	3
	or	
HSC 3549	Clinical Physiology for Health Professionals	3
FOS 4041	Food Science	3
FOS 4041L	Food Science Lab	1
FSS 3233C	Institutional Food Service Production	3
HUN 3191	World Nutrition[1]	3
HUN 4241	Advanced Nutrition	3
HUN 4403	Life Cycle Nutrition	3

[1]Not required for students enrolled in the Coordinated Program in Dietetics. These students enroll in practicum courses in lieu of this course.

Recommended Electives

Selected courses in: computer science, education, statistics, social work, health science, adult education, business, anthropology, sociology.

Minor in Nutrition

A twelve-credit nutrition course sequence at the undergraduate level affords students the opportunity to study food and nutrients, their physiological functions, normal nutritional requirements, socioeconomic influences on food choices and other aspects of food technology. The required science foundation courses provide the necessary background of chemistry and biological sciences to understand the physiological and biochemical basis of nutrition, as a multi-disciplinary science with relevance to health. Students minoring in nutrition learn to interpret nutrition research and contemporary claims and theories as a basis for improving food habits. Students interested in entering health professional fields of physical or occupational therapy, schools of medicine, dentistry or veterinary medicine find the nutrition minor relevant to their future careers because of diet and health relationships.

This nutrition minor will not meet licensure requirements for qualifications as a nutritionist in the State of Florida. A license is required to provide nutritional counseling to individuals.

Minor Requirements

HUN 2201	Principles of Nutrition	3
HUN 4241	Advanced Nutrition[1]	3
HUN 4403	Life Cycle Nutrition	3

[1]Prerequisite: Human Physiology, Organic Chemistry; Corequisite: Biochemistry

In addition, one of the following courses:

HUN 3191	World Nutrition	3
FOS 3021	Fundamentals of Food	3
	and	
FOS 3021L	Fundamentals of Food Lab	1
FOS 3004	Food and the Consumer	3
FOS 4041	Food Science[1]	3
	and	
FOS 4041L	Food Science Lab[1]	1

[1]Prerequisite: FOS 3021, FOS 3021L, and HUN 2201

Note: The following science courses are required to fulfill the prerequisites in the nutrition minor:

CHM 1045	General Chemistry I
CHM 1046	General Chemistry II
CHM 2210	Organic Chemistry I
CHM 2211	Organic Chemistry II or CHM 2200 for CHM 2210 and CHM 2211
CHM 2200	Survey of Organic Chemistry
BCH 3033	General Biochemistry
	or
HUN 4240	Nutrition and Biochemistry
PCB 3702	Intermediate Physiology
	or
PCB 3703, 3704	Human Physiology I, II
	or
HSC 3549	Clinical Physiology for Health Professionals

Course Descriptions

Definition of Prefixes

DIE-Dietetics; FOS-Food Science; FSS-Food Service Systems; HUN-Human Nutrition

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

DIE 3005 Orientation to Dietetics (1). Survey of role and responsibilities of the dietitian. Legal and ethical considerations necessary for the student dietitian in clinical experiences. Educational and personal qualifications for specialization in dietetics. Prerequisite: HUN 2201. (SS)

DIE 3125 Management of Dietary Systems (3). Survey of various types of institutional food service systems; management concepts in planning, implementing, and evaluating food service systems. Prerequisites: Basic Management, Quantity Food Preparation. (SS)

DIE 3175 Dietetic Management Practicum (4). Developing skills for DIE 3125 and DIE 4365. Clinical assignments in several food service institutions in this area. Clinical component: open only to students in the Coordinated Program. Prerequisite: DIE 3355 and DIE 4277. (F)

DIE 3244 Medical Nutrition Therapy (3). Techniques of assessing nutritional status and adjusting nutrient/energy intake to accommodate medical treatment. Corequisite: DIE 3244L. Prerequisite: HUN 2201. (F)

DIE 3244L Medical Nutrition Therapy Lab (1). Application of nutritional assessment and dietary prescriptions to accommodate medical treatment. Corequisite: DIE 3244. (F)

DIE 3317 Dietetics in Community Health (3). Study of community agencies providing nutrition guidance for differing age groups. Emphasis on influencing nutrition and health care policy. Prerequisites: HUN 2201, DIE 3005. Prerequisite or Corequisite: HUN 4403. (F)

DIE 3355 Dietetics in Community Health Practicum (2). Observation and participation in activities of community agencies. Nutrition education and counseling experiences. Clinical component: Open only to students in the Coordinated Program. Corequisite: DIE 3317. (F)

DIE 3434 Nutrition Education (2). Planning for groups/individual basic nutrition and clinical nutrition education, and working with the instructional media. Prerequisite: Basic nutrition. Corequisites: Nutrition Education Lab. (SS)

DIE 3434L Nutrition Education Laboratory (1). Students plan and practice various forms of nutrition education individual, groups and instructional media. (SS)

DIE 4195 Special Problems in Dietetic Administration (1-3). In-depth study of a problem in dietetic administration chosen to coincide with a student's interest and career goals. Student will develop objectives stated in behavioral terms and demonstrate skills in information gathering, analysis, and technical writing. Prerequisite: Permission of the instructor.

DIE 4246 Clinical Nutrition (3). Study of the complex dietetic problems accompanying metabolic disorders. Determination of nutrient requirements based on pathophysiological conditions. Prerequisite: DIE 3244. (S)

DIE 4246L Clinical Nutrition Laboratory (2). Application of nutrient requirements for the treatment of complex pathophysiological conditions. Prerequisites: DIE 3244 and DIE 3244L. Corequisite: DIE 4246. (S)

DIE 4277 Clinical Nutrition Practicum (4). Participation in activities in clinical affiliations focusing on nutritional assessment, planning, treatment and follow-up of patients. Clinical component: open only to students in the Coordinated Program. Corequisite: DIE 4246; Prerequisite: DIE 3355. (S)

DIE 4296 Special Problems in General Dietetics (1-3). In-depth study of a problem chosen to coincide with student's interest and career goals. Student develops behavioral objectives and demonstrates skills in information gathering, analysis and technical writing. Prerequisite: Permission of the instructor. (F,S,SS)

DIE 4365 Dietetic Management of Nutrition Programs (3). Advanced concepts of managerial functions as an institutional consultant, a member of a community nutrition program, a private therapeutic consultant, full time institutional food service administrator. Advanced standing required. Prerequisites: DIE 3125 or permission of the instructor, basic competency in management principles. (F)

DIE 4377 Applied Dietetic Management of Nutrition Programs (2). Observation and participation in community agencies, institutions, and simulated setting the development of entry level competencies in the management of nutrition and food service programs. Corequisite: DIE 4365. (F)

DIE 4435 Nutrition Counseling and Commincation Skills (3). Nutrition counseling methods and commincation skills for development of entry level competencies. Advanced standing in dietetics required. Prerequisite: DIE 3244, Corequisite: DIE 4435L.

DIE 4435L Nutrition Counseling and Commincation Skills Lab (1). Small group video recorded practice in instruction counseling communication skills. Prerequisite: Advanced standing in dietetics. Corequisite: DIE 4435. (S)

DIE 4506 Seminar in Dietetics and Nutrition (3). Professional skills development for career effectiveness in today's job world; emphasis on speaking and writing related to contemporary nutrition issues. Majors only, senior standing. (F,S)

DIE 4536 Advanced Practicum in Dietetics (9). In-depth study combining theoretical concepts and clinical experience. Learning experience planned cooperatively by the student, campus instructor, and clinical instructor to meet student needs and goals. Prerequisites: DIE 4246, DIE 4277, and permission of Director of the Coordinated Program. Clinical component: Open only to students in the Coordinated Program. (S)

DIE 4537 Specialized Dietetic Practicum (3). Practice in a specialized area such as Pediatrics, Diabetes, etc. Prerequisites: Nutrition II, and Clinical Nutrition. (SS)

DIE 4564 Independent Senior Research in Dietetics (3). Research methodology for planning, conducting and analyzing a study in applied dietetics. Students will design a protocol, collect data, analyze and present results/conclusions. (F)

DIE 4963 Comprehensive Dietetic Examination (0). A comprehensive examination of the dietetics and nutrition curriculum. Prerequisite: Senior standing. (F,S)

FOS 3004 Food and the Consumer (3). Study of purchasing, storage, and preparation of food. Consideration of life style influences on food choices. Designed to develop skills in purchasing and preparing foods to meet personal, social, and physical needs. Demonstration laboratory included.

FOS 3021 Fundamentals of Food (3). Study of selection, processing, and preparation of food with attention to quality and nutrient retention. Corequisite: FOS 3021L. (F,SS)

FOS 3021L Fundamentals of Food Laboratory (1). Techniques of food preparation to maintain nutrients and food quality. Corequisite: FOS 3021. (F,SS)

FOS 4041 Food Science (3). Physical and chemical changes in food occurring as a result of various methods of processing, preparation, and storage. Prerequisites: Organic Chemistry, HUN 3122 or HUN 2201, FOS 3021, or equivalents. Corequisite: FOS 4041L. (S)

FOS 4041L Food Science Laboratory (1). Experimental laboratory in the physical and chemical characteristics of food. Corequisite: FOS 4041. (S)

FSS 3316 Food Science For Institutions (3). Proper food handling in institutional settings with use of sound management principles closely coordinated with food science advances and government regulations. Laboratory and field trips to strengthen theoretical concepts. Prerequisite: FOS 3021.

HUN 2201 Principles of Nutrition (3). Nutrients and their interrelationships, requirements of individuals, and food sources. Investigates current controversies, fads/fallacies, and health related issues. Recommended for non-majors. (F,S,SS)

HUN 2201L Principles of Nutrition Labortory (1). Using the scientific method, study of nutrients/foods required for Recommended Dietary Allowances. Assessment of personal nutrition indicators using anthropometric, and other indices. Corequisite: HUN 2201.

HUN 3122 Nutrition and Culture (3). Study of the scientific principles of nutrition and impact of culture on nutrition and health. Recommended for Junior-Senior non-majors. (F,S,SS)

HUN 3191 World Nutrition (3). Exploration of food production, distribution, and consumption patterns of selected nations. Analysis of variables affecting nutritional intake and change, and hunger. (F,S,SS)

HUN 3294 Women's Nutrition Issues (3). Focus is on women, health and nutrition. Covers nutrition throughout women's life cycle, principles of absorption, digestion, metabolism, food composition, local to international issues. New labeling laws, current nutrition research. (F)

HUN 3414 Nutrition for the Athlete (3). Exploration of nutrition in the enhancement of health and athletic performance. Nutrition claims targeted to the exercising population will be evaluated. Prerequisite: HUN 2201.

HUN 4240 Nutrition and Biochemistry (3). Study of the relationship of nutrition and biochemistry with emphasis on digestion, absorption, metabolism of nutrients, and determination of norms. Prerequiste: Organic Chemistry concurrent or prerequiste and Junior standing. (F,SS)

HUN 4241 Advanced Nutrition (3). Roles of nutrients in metabolic processes. Effects of excesses and deficiencies. Prerequisites: Organic Chemistry, Physiology, and HUN 2201 or equivalent. BCH 3033 pre or corequisite. (F)

HUN 4403 Life Cycle Nutrition (3). Nutrient requirements, dietary adequacy, food habits, special nutritional concerns during pregnancy, infancy, childhood, adolescence, and adulthood including aging. Prerequisite: HUN 2201 or HUN 3122. (F,S)

Health Information Management

Odalys Martinez, BS, *RRA, Instructor*

The major in Health Information Management prepares the student for the variety of responsibilities and functions involved in the management of a health information department. Health Information Managers design and supervise systems relating to the collection, analysis, retention, retrieval and evaluation of health information. The priorities of the position include maintaining complete, accurate and timely medical records, assisting other members of the health care team in their information-related needs, and developing and implementing policies, procedures and systems which adhere to the ethical, financial, and legal requirements and meet the accreditation standards established for the health care facility.

The Health Information Management Program is accredited by the Commission on the Accreditation of Allied Health Educational Programs (CAAHEP) in cooperation with the American Health Information Management Association's Council on Accreditation. Graduates are eligible to take the National Certification Examination and become a credentialed Registered Record Administrator (RRA) upon the successful completion of this exam.

Bachelor of Science in Health Information Management

Degree Program Hours: 120

Prerequisite Courses

Anatomy and Physiology, Statistics, Accounting I and II, and Introduction to Microcomputers are prerequisites to enroll in certain courses of the required curriculum. All prerequisites should be completed with a passing grade of at least a 'C'.

To qualify for admission to the program, applicants must have met all the lower division requirements including CLAST, completed 60 transferable semester hours with a minimum 2.0 cumulative GPA, and must be otherwise acceptable into the program.

Upper Division Program

Required Courses: (60)

Semester I (13)

HSC 3531	Medical Terminology	3
MRE 3110	Introduction to HIM Profession	3
MRE 3202	Basic ICD-9-CM Coding	3
MRE 3431	Fundamentals of Medical Science I	3
MRE 3800	Directed Practice I	1

Semester II (13)

HAS 4420	Legal Aspects and Legislation in Health Care	3
MRE 3204	Advanced ICD-9-CM Coding	3
MRE 3205	Research Methods in Health Information Management	3
MRE 3432	Fundamentals of Medical Science II	3
MRE 3810	Directed Practice II	1

Semester III (9)

MRE 3312	Introduction to Management in Health Care	3
MRE 4203	CPT-4 Coding and Reimbursement Issues	3
HSA 4192	Health Management and Systems Engineering	3

Semester IV (13)

HAS 4170	Health Care Finance and Accounting Management	3
MRE 3219	Communication Skills for Health Care Professionals	3
MRE 4344	HIM Departmental Systems	3
MRE 4500	Clinical Quality Assessment and Improvement	3
MRE 4831	Directed Practice III	1

Semester V (12)

MRE 4211	Health Information Systems	3
MRE 4304	Problem-Solving Skills in Health Information Management	3
MRE 4400	Multi-Institutional Health Information	3
MRE 4835	Internship in Health Information Management	3

Must earn a minimum grade of 'C' (2.0) in each course. Courses with a grade of 'C-' or below must be repeated.

Course Descriptions

Definition of Prefix

MRE-Medical Record Administration; HSA - Health Services Administration; HSC- Health Science Concentration. F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

HSC 3531 Medical Terminology (3). Provides the student with basic medical language skills including, pronunciation, spelling, and definitions as a foundation for developing the degree of competency required to read and understand medical reports and communicate with physicians and other medical professionals. Prerequisites: Human Anatomy and Physiology. (F,S)

MRE 3110 Introduction to HIM Profession (3). Introduces the student to the historical development of health information management and focuses on the work and responsibilities of health information professionals and their relationship with other health care providers. The student will acquire a full understanding of the medical record, including its development, purpose, content, format analysis, value and uses along with the methods used to file and track records. (F)

MRE 3202 Basic ICD-9-CM Coding (3). Concepts and principles of nomenclatures and classification systems used to record and compare health data. Development of ICD-9-CM coding skills and applications for research. Prerequisites: Human anatomy and physiology and medical terminology. (F)

MRE 3204 Advanced ICD-9-CM Coding Procedures (3). Introduction to coding as it relates to DRG system. Record analysis and data quality addressed. CPT, DSM III and current coding issues and regulations presented and discussed. Encoder experience included. Prerequisite: MRE 3202. (S)

MRE 3205 Research Methods in Health Information Management (3). This course is designed to introduce students to research concepts and tools. Emphasis is placed on research design and data collection and analysis techniques. Discussion of basic health statistics. Prerequisites: Introduction to Health Information Management, Introduction to Management, Statistics. (S)

MRE 3219 Communication Skills for Health Care Professional (3). This course provides an understanding of process of formal communication for the health care profession. It offers an overview of communication techniques leading to sound decision making and effective team work. It prepares students to formulate and present ideas clearly and persuasively. Prerequisites: Intro to Management, Intro to HIM profession, DPI. (F)

MRE 3312 Introduction to Management in Health Care (3). General principles of management of a health information system in any type of health care facility, including hospitals, intermediate and long term care facilities, clinics, HMO's etc. The basic concepts of management as related to the health care industry are addressed. (SS)

MRE 3431 Fundamentals of Medical Science I (3). Beginning with the cell and progressing through the various organ systems, the conceptual patterns of disease are explored and defined by etiology and the immune and repair responses generated by the body. The diagnostic and treatment modalities for each are studies and identified in the medical record for correlation with coding procedures. Prerequisites: Human Anatomy and Physiology. (F)

MRE 3432 Fundamentals of Medical Science II (3). A review of body systems to explore the various disease processes and pathological conditions with affect the organs involved. Includes detailed explanations of how the diagnostic work-ups are recorded in the medical record and how to recognize and interpret the significant findings and make intelligent coding decisions. Prerequisites: Human anatomy and physiology. (S)

MRE 3800 Directed Practice I (1). Orientation of the student to the hospital health information department and adjunct diagnostic or therapeutic units; including the outpatient department, emergency room, admitting office, x-ray, pharmacy, physical therapy, laboratory, and pathology department. (F)

MRE 3810 Directed Practice II (1). Orientation of the student to health information department functions. Rotation of the student through technical functions of the department, following the flow of the patient's record after discharge. Includes the discharge procedure, analysis, coding and indexing systems; statistical reporting; correspondence; control of the incomplete medical record; and processing of the completed record. Prerequisites: Directed Practice I, Basic ICD-9-CM Coding, Introduction to Management. (S)

MRE 4203 CPT-4 Coding and Reimbursement Issues (3). CPT-4/HCPCS coding practices, data collection and outpatient reimbursement issues will be presented and discussed. Prerequisites: Anatomy, Physiology, Medical Terminology, Basic and Advanced ICD-9CM Coding. (SS)

MRE 4211 Health Information Systems (3). Development of health information systems and applications for evaluation and management of a health information department. Emphasis is on computerization and "hands-on" experience. Prerequisite: Introduction to HIM Profession, Intro to Micro Computers, DPI, DPII, Communication Skills. (S)

MRE 4304 Problem-Solving Skills in Health Information Management (3). Through illustrative case reports, group discussions, role playing, oral reports, lectures, buzz sessions, and review of the literature; students explore effective methods for identifying and arriving at satisfactory solutions to specific types of problems they may expect to encounter in the administration of health information services. Prerequisites: MRE 3110, 3202, 3205, 3312, 3800, 3810, 4202, 4344, 4415, 4831, 4932. (S)

MRE 4344 HIM Departmental Systems (3). Application of management principles to health information systems, including: development of manuals, job descriptions, interviewing and evaluation techniques, forms design, environmental planning etc. External activities assigned. Prerequisites: Introduction to HIM Profession and Introduction to Management, DPI. (F)

MRE 4400 Multi-Institutional Health Information (3). Standards and procedures for long-term, ambulatory care, home health, rehabilitation, psychiatric, dental, hospice, and other health care services are investigated and compared. Prerequisites: Introduction to HIM Profession, Research Methods, Introduction to Management, Quality Assessment.(S)

MRE 4500 Clinical Quality Assessment and Improvement (3). Course is designed to introduce student to quality management techniques. It includes areas of UR, RM, QA, and QI. Role of computers in QA/QI is explored. Prerequisites: Introduction to HIM Profession, Introduction to Management, DPI, DPII, Research Methods. (F)

MRE 4831 Directed Practice III (1). Experience in quality improvement, risk management, and utilization review areas. Clinical experience in acute care and non-acute care facilities. Directed Practice I, Directed Practice II, Quality Assessment and Improvement, HIM Department Systems. (F)

MRE 4835 Internship in Health Information Management (3). Management experience in a health information department under the supervision of a credentialed medical record director. Emphasis on administrative and medical staff relationships. Prerequisites: DPI, DPII, DPIII. (S)

MRE 4905 Directed Independent Study (1-3). Individual conferences, assigned readings, and reports on investigations related to the Health Informaiton Management profession. (F,S,SS)

MRE 4932 Special Topics (3). Designed to address topics not otherwise offered in the curriculum but specific to or required for health information management. Topics to be announced yearly. (F,S,SS)

Medical Laboratory Sciences

Beverly A. Warden, *Associate Professor and Chairperson*
Barbara V. Anderson, *Assistant Professor and Director, Medical Technology Program*
Jerry A. Bash, *Associate Professor*
Manoucher Dezfulian, *Associate Professor*
Janet A. Lineback, *Professor*
Patrick F. Shen, *Associate Professor*
Sylvia L. Smith, *Professor and Coordinator, Graduate Program*

Medical technologists perform complex biological and chemical analyses on blood and other specimens to enable the physician to diagnose and treat disease. Individuals wishing to pursue a career in medical technology should have a strong science background with emphasis on laboratory analytical skills. They must be reliable, conscientious, interested in helping others, and recognize their responsibility for human lives in the practice of modern medicine. Students receive intensive didactic and laboratory training in the areas of clinical chemistry, hematology, immunohematology, and microbiology. Opportunities for employment exist in hospital, government, and industrial clinical laboratories, academic and industrial research laboratories, and in sales and technical services in clinical diagnostic products industries.

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). A graduate of the program is eligible to apply for examination and certification by the American Society of Clinical Pathologists' Board of Registry as a Medical Technologist, MT (ASCP); by the National Certification Agency for Medical Laboratory Personnel as a Clinical Laboratory Scientist, CLS (NCA); and for licensure as a Medical Technologist by the State of Florida. Clinical practice is conducted at Baptist, Cedars, Jackson Memorial, Mercy, and South Miami Hospital in Miami-Dade, and Memorial Hospital in Broward.

Bachelor of Science in Medical Technology

Degree Program Hours: 126

Lower Division Preparation

The student seeking admission to professional MLS courses should have: (1) completed a minimum of 60 semester hours in an accredited two or four-year institution, (2) completed all of the general education requirements, (3) earned a minimum cumulative GPA average of 2.5, (4) earned a minimum cumulative GPA of 2.0 in required science courses, (5) completed the following preparatory courses: two semesters of general biology with laboratory, two semesters of general chemistry with laboratory, two semesters of organic chemistry with laboratory, one semester of general microbiology with laboratory, one semester of college algebra, one semester of statistics, and one semester of human physiology with laboratory. (Survey or introductory courses in science and mathematics are not acceptable. Two semesters of anatomy and physiology with laboratories may substitute for biology II with laboratory and human physiology with laboratory.) Credits in general microbiology, biochemistry, or immunology which are more than seven years old must be updated (see department for details).

FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Upper Division Program

The University-integrated '2+2' program has limited enrollment. Students are admitted to the program in Summer Semester. It is recommended that applications for Summer Semester be received by March 1 but applications will be processed throughout Spring Semester on a space-available basis. An interview may be required. The medical technology professional courses and hospital clinical practice are open only to majors in the program (or by permission of the instructor). Entrance to clinical practice depends upon satisfactory evaluation of the student's record by the faculty. Students must satisfactorily complete a written comprehensive examination to graduate from the program.

Required Courses

Freshman Year

Fall Semester: (13)

BSC 1010	General Biology I	3
BSC 1010L	General Biology I Lab	1
CHM 1045	General Chemistry	4
CHM 1045L	General Chemistry Lab	1
ENC 1101	English Composition	3
SLS 1501	Freshman Experience	1

Spring Semester: (14)

BSC 1011	General Biology II	3
BSC 1011L	General Biology II Lab	1
CHM 1046	General Chemistry II	3
CHM 1046L	General Chemistry II Lab	1
ENC 1102	Literary Analysis	3
MAC 2132	Pre-Calculus	3

Summer Semester: (9)

STA 2122	Introduction to Statistics	3
Social Science Core Course		3
Art Core Course		3

Sophomore Year

Fall Semester: (12)

Historical Foundations Core Course		3
CHM 2210	Organic Chemistry I	4
CHM 2210L	Organic Chemistry I Lab	1
PCB 3702	Intermediate Human Physiology	3
PCB 3702L	Intermediate Human Physiology Lab	1

Spring Semester: (11)

Critical Inquiry Core Course		3
CHM 2211	Organic Chemistry II	3
CHM 2211L	Organic Chemistry II Lab	1
MCB 3023	General Microbiology	3
MCB 3023L	General Microbiology Lab	1

Summer Semester: (3)

MLS 3038	Introduction to MLS	2
MLS 3038L	Introduction to MLS Techniques	1

Junior Year

Fall Semester: (12)

CHM 4305	Biological Chemistry	3
MLS 3605	Clinical Instrumentation	2
MLS 3605L	Clinical Instrumentation Laboratory	1
MLS 4405	Clinical Microbiology	4
MLS 4405L	Clinical Microbiology Laboratory	2

Spring Semester: (11)

MLS 4505	Clinical Immunology	4
MLS 4505L	Clinical Immunology Laboratory	1
MLS 4625	Clinical Chemistry Methods	4
MLS 4625L	Clinical Chemistry Laboratory	2

Summer Semester: (12)

MLS 3430	Medical Parasitology	1
MLS 3430L	Medical Parasitology Lab	1
MLS 4306	Clinical Hematology	4
MLS 4306L	Clinical Hematology Laboratory	3
MLS 4461	Advanced Microbiology	3

Senior Year

Fall Semester: (14)

MLS 4032C	Orientation to Clinical Rotation	1
MLS 4334	Clinical Coagulation	1
MLS 4334L	Clinical Coagulation Laboratory	1
MLS 4535	Immunohematology	4
MLS 4535L	Immunohematology Laboratory	3
MLS 4630	Advanced Clinical Chemistry	3
MLS 4705	Laboratory Management	1

Spring Semester: (12)

MLS 4820L	Clinical Practice/ Chemistry	3
MLS 4821L	Clinical Practice/ Microbiology	3
MLS 4822L	Clinical Practice/ Hematology	3
MLS 4823L	Clinical Practice/Blood Bank and Immunology	3

Minor in Medical Laboratory Sciences

The minor programs are aimed at biological and chemical sciences majors who wish to develop expertise in a related area of medical laboratory sciences, and who may wish to seek hospital or clinical diagnostics and industrial employment after graduation. These programs provide the clinical courses required for state licensure and/or national certification. Contact the department for details.

Minor Eligibility Requirements

Completion of all prerequisite sciences with a cumulative GPA of 2.0 or better.

Microbiology

Prerequisites:

One year general chemistry with lab
One year organic chemistry with lab
One year general biology with lab
One semester general microbiology with lab
One semester biochemistry
or
One semester immunology

Required Courses: (15)

MLS 3038	Introduction to MLS	2
MLS 3430	Medical Parasitology	1
MLS 3430L	Medical Parasitology Lab	1
MLS 4405	Clinical Microbiology	4
MLS 4405L	Clinical Microbiology Lab	2
MLS 4461	Advanced Microbiology	3
MLS 4821L	Clinical Practice/ Microbiology	3

Immunohematology

Prerequisites:

One year general biology with lab
One year general chemistry with lab

Required Courses: (14)

MLS 3038	Introduction to MLS	2
MLS 4334	Clinical Coagulation	1
MLS 4505	Clinical Immunology	4
MLS 4505L	Clinical Immunology Lab	1
MLS 4535L	Immunohematology Lab	3
MLS 4535	Immunohematology	4
MLS 4823L	Clinical Practice/ Blood Bank	3

Hematology

Prerequisites:

One year general chemistry with lab
One year organic chemistry with lab
One year general biology with lab
One semester biochemistry

Required Courses: (15)

MLS 3038	Introduction to MLS	2
MLS 3038	Introduction to MLS Techniques	1
MLS 4306	Clinical Hematology	4
MLS 4306L	Clinical Hematology Lab	3
MLS 4334	Clinical Coagulation	1
MLS 4334L	Clinical Coagulation Lab	1
MLS 4822L	Clinical Practice/ Hematology	3

Clinical Chemistry

Prerequisites:

One year general chemistry with lab
One year organic chemistry with lab
One semester biochemistry

Required Courses: (16)

MLS 3038	Introduction to MLS	2
MLS 3605	Clinical Instrumentation	2
MLS 3605L	Clinical Instrumentation Lab	1
MLS 4625	Clinical Chemistry Methods	4
MLS 4625L	Clinical Chemistry Methods Lab	2
MLS 4630	Advanced Clinical Chemistry	3
MLS 4820L	Clinical Practice/Clinical Chemistry	3

Course Descriptions

Definition of Prefixes

MLS - Medical Laboratory Sciences
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

MLS 1920 Clinical Chemistry - Review and Update (1). Review and update in clinical chemistry including, carbohydrates, proteins, lipids, enzymes, electrolytes, and drugs. Intended for individuals sitting for licensure or certification examinations. Prerequisites: High school diploma and clinical laboratory training.

MLS 1921 Immunohematology: Review and Update (1). A review of current principles and practices in blood banking and immunohematology in preparation for state licensure examination. Prerequisites: High school diploma and clinical laboratory training.

MLS 2030 Introduction to Medical Laboratory (1). An introduction to the structure and functions of a medical laboratory including test procedures, terminology, safety, and laboratory tours. Not for MLS majors. (S)

MLS 3038 Introduction to Medical Laboratory Science (2). Lecture and laboratory introducing the profession of medical laboratory sciences and basic laboratory skills including venipuncture, laboratory calculations, terminology and medical laboratory safety. Prerequisite: Permission of the instructor. (SS)

MLS 3038L Introduction to Medical Laboratory Techniques (1). Laboratory to accompany MLS 3038, including laboratory safety, blood collection, microscopy and basic medical laboratory techniques. Majors must take MLS 3038 concurrently. Prerequisite: Permission of the Instructor

MLS 3220 Clinical Microscopy (1). Introduction to the structure and physiology of the kidney, CSF and other biological fluids. The clinical significance of various findings in the urine CSF, and other biological fluids are discussed. Prerequisite: MLS 4306 or permission of the instructor. Corequisite: MLS 3220L.

MLS 3220L Clinical Microscopy Laboratory (2). Laboratory to accompany MLS 3220, dealing with routine procedures for urinalysis, microscopic examination of urine, semen, CSF, and other biological fluids. Corequisite: MLS 3220.

MLS 3430 Medical Parasitology (1). Classification, morphology, and life cycles of medically significant parasites. Emphasis is on microscopic identification, specimen processing/examination, and infection control. Prerequisite: General Biology with Laboratory. (S or SS)

MLS 3430L Medical Parasitology Laboratory (1). Laboratory to accompany MLS 3430. (S or SS)

MLS 3605 Clinical Instrumentation (2). Fundamentals of clinical laboratory instrumentation including basics of electricity and electronics, preventive maintenance, and quality control procedures will be emphasized. Corequiste: BCH 3033 or CHM 4305. Prerequisites: CHM 2111 and CHM 2211L or equivalent. (F)

MLS 3605L Clinical Instrumentation Lab (1). Laboratory to accompany MLS 3605. Introduction to the operation, applications, and preventive maintenance of clinical laboratory instruments. Quality control procedures. Corequisite: MLS 3605. (F)

MLS 3700 Management Procedures for Laboratory Employees (1). Job descriptions, salary schedules, equipment and reagent purchasing, quality assurance programs, work-load recording methods. Individualized projects adapted to meet the needs of facility where student is employed. Prerequisite: One year of clinical laboratory experience.

MLS 3750 Laboratory Quality Control, Safety, and Instrument Maintenance (3). Course designed for the working technologist who wishes to protect himself, his coworkers, and others in his environment from the hazards inherent in laboratory operations, and who wishes to present better evidence of compliance with the various inspection and accreditation organizations which now inspect laboratories. Prerequisite: One year of clinical laboratory experience.

MLS 4032 Orientation to Clinical Rotation (1). Introduction to professional practice including medical ethics, diversity training, educational methodology, job placement skills, CPR and professional issues. Seniors only. (F)

MLS 4306 Clinical Hematology (3-4). A basic course in the origin of erythrocytes and leukocytes, their morphology and function. Mechanisms, manifestations, and abnormal laboratory findings of hematologic diseases and urinalysis. Prerequisite: BCH 3033 or permission of the instructor. (F or SS)

MLS 4306L Clinical Hematology Laboratory (1-3). Laboratory to accompany MLS 4306, dealing with manual and automated procedures for determining complete blood and platelet counts. Urinalysis and clinical microscopy. (F or SS)

MLS 4307L Advanced Lab Skills in Clinical Hematology (1). A laboratory course covering advanced skills in hematology including: abnormal blood cells morphology, cytochemistry of leukemia cells, and automated hematology analyzers. Prerequisite: Admission to MLS Articulation Program.

MLS 4334 Clinical Coagulation (1). A basic course in the study of coagulation factors, platelets, the fibrinolytic system, platelet aggregation. Prerequisite: MLS 4306 or permission of the instructor. (F)

MLS 4334L Clinical Coagulation Laboratory (1). Laboratory to accompany MLS 4334, dealing with manual and automated procedures for determining coagulation factor deficiencies and platelet function. (F)

MLS 4405 Clinical Microbiology (3-4). Methods for the isolation and identification of clinically significant organisms. Epidemiology, symptoms, diagnosis and treatment of infectious diseases. Mechanisms of microbial infection. Host immunity. Prerequisite: MCB 3023 and MCB 3023L or equivalent. Corequisite: BCH 3033 or CHM 4305. (variable)

MLS 4405L Clinical Microbiology Laboratory (1-3). Laboratory to accompany MLS 4405. Isolation and identification of normal and pathogenic flora from genuine and simulated clinical specimens. Identification of clinically significant fungi. (Variable)

MLS 4406L Advanced Laboratory Skills in Clinical Microbiology (1). A laboratory course covering advanced skills in clinical microbiology including isolation and identification of important pathogenic bacteria and fungi. Prerequisite: Admission for MLS Articulation Program.

MLS 4461 Advanced Microbiology (3). Lectures and laboratory. Identification of rare pathogens including Chlamydia and Rickettsia. Virology and tissue culture techniques. Mode of action of bacterial resistance to antibiotics. Prerequisites: MLS 4405 and BCH 3033 or permission of the instructor. (S or SS)

MLS 4465 Selected Topics in Microbiology (3). Current topics in Microbiology of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

MLS 4505 Clinical Immunology (4). Study of immunological procedures employed by the clinical laboratory for the diagnosis of diseases such as rheumatoid arthritis, infectious mononucleosis, syphilis. (S or SS)

MLS 4505L Clinical Immunology Laboratory (1). Diagnostic procedures and techniques performed in a clinical immunology laboratory such as precipitation, agglutination, syphilis serology and other immunoassays. Laboratory to accompany MLS 4505. (S or SS)

MLS 4535 Immunohematology (3-4). Fundamentals of blood banking including blood group systems, pretransfusion testing methods, hemolytic disease of the newborn, HLA, blood component therapy, and adverse effects of transfusion. Prerequisites: PCB 4233, MLS 4505, and MLS 4505L. (F)

MLS 4535L Immunohematology Laboratory (1-3). Laboratory to accompany MLS 4535. (F)

MLS 4536L Advanced Laboratory Skills in Immunohematology (1). A laboratory course covering advanced skills in immunohematology including a review of pretransfusion tests, elutions, absorptions, ABO discrepancies and identification of multiple antibodies. Prerequisite: Admission to MLS articulation program.

MLS 4540 Forensic Serology (3). Legal aspects of collection and analysis of human serological evidence. Identification of human blood, blood grouping, polymorphic proteins, genetic markers, semen analysis, DNA analysis, quality control. Prerequisite: Biochemistry.

MLS 4550C Advanced Immunohematology (1). In depth study of Transfusion Therapy, the use and preparation of blood components, and special problems in blood banking. Lectures and laboratory. Prerequisite: MLS 4535.

MLS 4555 Selected Topics in Immunohematology (3). Current topics in Blood Banking of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

MLS 4625 Clinical Chemistry Methods (3-4). Procedures for analysis of carbohydrates, proteins, lipids, enzymes, electrolytes and drugs. Interpretation of biochemical tests used in the diagnosis and treatment of disease. Renal, liver, and cardiac function profiles. Prerequisites: MLS 3605, MLS 3605L, and BCH 3033 or CHM 4305. (S or SS)

MLS 4625L Clinical Chemistry Laboratory (1-3). Laboratory to accompany MLS 4625. (S or SS)

MLS 4626L Advanced Laboratory Skills in Clinical Chemistry (1). A laboratory course covering advanced skills in clinical chemistry including DNA techniques, kinetic enzymes, automation, drug testing, and quality control Prerequisites: Admission to MLT Articulation Program; organic and biological/biochemistry. Corequisite: MLS 4625.

MLS 4630 Advanced Chemistry (3). Analysis of thyroid hormones, estrogens, adrenal hormones and metabolites, immunoassay, radioisotope measurement, amniotic fluid analysis, toxicology, multichannel analyzers, and chromatographic methods. Prerequisite: MLS 4625.

MLS 4630L Advanced Chemistry Laboratory (2). Elective topics in laboratory to accompany MLS 4630. (F or SS)

MLS 4635 Selected Topics in Clinical Chemistry (3). Current topics in Clinical Chemistry of particular clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

MLS 4705 Laboratory Management (1). Personnel handling, laboratory records, equipment and reagent purchasing, laboratory computerization, quality assurance programs, workload recording programs, scheduling and methods of laboratory self-evaluation. Seniors only. (F)

MLS 4755C Laboratory Statistics and Quality Control (2). Lecture topics to be covered include basic laboratory statistics, linear regression and correlation analysis, quality control charting techniques, new method evaluation, problem solving using computer programs. Seniors only. (S)

MLS 4820L Clinical Practice Chemistry (1-3). Practical experience in a hospital chemistry laboratory. All MLS courses must be completed before students will be permitted to register for clinical practice. (F,S,SS)

MLS 4821L Clinical Practice Microbiology (1-3). Practical experience in a hospital microbiology laboratory. (F,S,SS)

MLS 4822L Clinical Practice Hematology (1-3). Practical experience in a hospital hematology laboratory. (F,S,SS)

MLS 4823L Clinical Practice Blood Bank and Immunology (1-3). Practical experience in a hospital blood bank and immunology laboratory. (F,S,SS)

MLS 4905 Independent Study (1-3). Special work, directed readings, lecture and/or laboratory assignment, determined by advisor in accord with student's interests. Prerequisite: Permission of advisor.

MLS 4910 Directed Independent Research (1-6). Investigation of a problem in hematology, clinical microbiology, immunohematology and clinical chemistry requiring independent research directed and supervised by the instructor. Prerequisite: Permission of the instructor.

MLS 4934 Senior Seminar (1). Preparation and presentation of literature review and individualized projects. Instructional methods. (F)

School of Nursing

Conners, Veronica, RN, Ed.D, Ph.D. *Professor and Director of Nursing*
Blais, Kathleen, RN, Ed.D. *Associate Professor, Nursing*
Burkett, Majorie, ARNP, Ph.D. *Associate Professor, Nursing*
Coffin, Douglas, ARNP, Ph.D. *Assistant Professor, Nursing*
Delpech, Paula, MSN, RN, ARNP, *Instructor, Nursing*
Ellis, Alvalis, ARNP, MSN *Instructor, Nursing*
Fletcher, Cynthia, RN, Ph.D *Assistant Professor, Nursing*
Frock, Terri, RN, Ed.D. *Assistant Professor, Nursing*
Hartley, Jacquelyn, RN, Ph.D. *Associate Professor, Nursing*
Jenkins, Sara, RN, MSN *Instructor, Nursing*
Jorda, Mary Louise, ARNP, MSN, *Instructor, Niursing*
Lizardo, Maria Lourdes, ARNP, Ed.D. *Assistant Professor, Nursing*
Lobar, Sandra, ARNP, Ph.D. *Associate Professor, Nursing*
Lowe, John, RN, Ph.D. *Assistant Professor, Nursing*
Madayag, Tomas, RN, Ed.D. *Assistant Professor, Nursing*
Martinson, Jace, RN, MSN *Instructor, Nursing*
Phillips, Suzanne, ARNP, Ed. D. *Associate Professor, Nursing*
Porter, Luz, ARNP, Ph. D. *Professor, Nursing*
Small, Norma, MS, RN, *Visitng Instructor, Nursing*
Velasco-Whetsell, Martha RN, Ph.D. *Associate Professor, Nursing*

The School of Nursing offers a professional program of study leading to the degree of Bachelor of Science in Nursing (BSN).

The School is accredited by the National League for Nursing, 61 Broadway, New York, New York 10006 and is approved by the Florida State Board of Nursing. It is open to generic and R.N. students. Upon graduation, generic students are eligible to write the State Board examination to become registered nurses.

The School also offers a Master of Science degree in Nursing, as well as selected continuing education courses.

Program Objectives

Upon completion of the BSN, graduates will be able to:

1. Synthesize scientific knowledge from nursing and related disciplines in the provision of care to clients within the health-illness continuum throughout the life span.
2. Analyze research findings from nursing and from other disciplines to improve or change nursing practice.
3. Evaluate nursing theories and concepts from other disciplines as a base for nursing practice.
4. Pro-act to the legal, social, political, and economic forces and ethical considerations which impact on the role of the professional nurse and on clients.
5. Collaborate with members of the health care team in the delivery of individualized, economic and ethical health care services with accountability and responsibility for own practice.
6. Utilize creative leadership to promote quality health care in a rapidly changing multicultural, multiethnic, global environment.
7. Value learning as a lifelong process through independent pursuit of personal and professional growth.

Bachelor of Science in Nursing (BSN) – Generic

Degree Program Hours: 123

Admission Requirements

Applicants to the School of Nursing must submit an Application for Admission to the University and must follow the regular University procedures. Applicants must be admitted to the University before admission to the School.

All necessary admission documents must be submitted by April 1 of each year preceding the Fall Term admission or October 15 of each year preceding the Spring Term admission. Students interested in the nursing major should contact the School to make an appointment with an academic advisor as soon as possible. The School of Nursing is located on the North Miami Campus, telephone: (305) 919-5915.

To be admitted to the program, applicants must have an overall GPA of 3.0 or higher, with no repeats in science courses, have met all the lower division requirements including CLAST, completed 60 semester hours, and be recommended for admission by the Nursing Admission Committee. The nursing program is selective.

The School of Nursing is a limited enrollment program and admission is competitive based on previous academic performance. The Florida Board of Nursing and several state and/or private agencies require the disclosure of conviction records for misdemeanors and/or felonies; therefore, this information will be required at the time of application.

Nursing majors are responsible for transportation expenses related to clinical experiences. They are required to carry health and accident insurance. To safeguard the health of clients, nursing students are required to submit proof of health examination and immunizations upon entry into the nursing program. Students must submit proof of basic cardiopulmonary resuscitation (CPR) certification (American Red Cross) prior to entering clinical courses in the School of Nursing. This CPR certification should cover the period of enrollment in the major.

Common Prerequisites

Mathematics

STA 1222	Introduction to Statistics

Social Sciences

PSY 2020	Introduction to Psychology
SYG 2000	Introduction to Sociology

Natural Sciences

APB 2170	Microbiology
APB 2170L	Microbiology Lab
CHM 1033	Survey of General Chemisty
CHM 1033L	Survey of General Chemisty Lab
PCB 2700	Human Physiology
PCB 2700L	Human Physiology Lab
ZOO 3731	Human Anatomy
ZOO 3731L	Human Anatomy Lab

Other Courses

HUN 2201	Nutrition
DEP 1000	Developmental Psychology

Lower Division Preparation

The following courses are required for admission to the nursing major:

1. English	12
2. College Math	3
3. Statistics	3
4. Natural Sciences:	
Chemistry	5
Human Anatomy/ Physiology	6-8
Microbiology	4
5. Social Science:	
Introductory Sociology	3
Introductory Psychology	3
6. Humanites	6
7. Nutrition	3
8. Human Growth and Development	3
9. Langauge	8-10

Scholastic Requirements

To remain in good academic standing students must:

1. Maintain an overall cumulative GPA of 2.25 or higher.

2. Achieve a grade of 'C' or higher in the science and nursing courses. A student who earns less than a 'C' in any nursing course will be required to repeat the course in order to progress in the nursing program. A student may repeat a course one time only. No more than two nursing courses can be repeated in order to remain in the program.

3. Required Examinations: In addition to the University requirements (CLAST), the School also requires the following:

a. RNs are required to complete selected equivalency examinations. (See RN - BSN Guidelines).

b. Generic students are required to pass specific nursing achievement examinations (To be announced at the beginning of each academic term). In addition, generic students are required to pass a nursing synthesis (exit) exam as a prerequisite to the BSN degree. (This examination is usually given during the last semester of the program in the Leardership Practicum course).

c. For educational research purposes, certain standardized examinations may be administered at selected points in the nursing curriculum.

4. The School reserves the right to terminate a student from the nursing program for reasons related to the inability to safely carry out professional responsibilities.

Note: The programs, policies, requirements, and regulations listed in this catalog are continually subject to review in order to serve the needs of the University's various publics and to respond to the mandates of the Florida Board of Regents and the Florida Legislature. Changes may be made without advance notice. Please refer to the General Information section for the University's policies, requirements, and regulations.

Required Nursing Courses

Junior Year

Semester I

NUR 3115	Approaches to Nursing IA: Foundations of Nursing	4
NUR 3115L	Approaches to Nursing IA: Foundations of Nursing Clinical	3
NUR 3065C	Approaches to Nursing IB: Client Assessment	3
NUR 3825	P.N. I: Socialization	3

Semester II

NUR 3259	Approaches to Nursing IIA: Adult/ Gerontological Physiological Nursing	4
NUR 3259L	Approaches to Nursing IIA: Adult/ Gerontological Physiological Nursing Clinical	6
NUR 3148	Pharmacologic Basis of Nursing Practice	3
NUR 3125	Pathophysiologic Basis for Nursing Practice	3

Semester III

NUR 3535	Approaches to Nursing IIB: Adult/ Gerontological Psychosocial Nursing	3
NUR 3535L	Approaches to Nursing IIB: Adult/ Gerontological Psychosocial Nursing Clinical	3
NUR 3827	P.N. II: Leadership: Leadership	3

Senior Year

Semester I

NUR 4457	Approaches to Nursing IIIA: Childbearing Family	3
NUR 4457L	Approaches to Nursing IIIA: Childbearing Family Clinical Family	3
NUR 4357	Approaches to Nursing IIIB: Childrearing	3
NUR 4357L	Approaches to Nursing IIIB: Childrearing Family Clinical	3
NUR 4165	P.N. III: Research	3

Semester II

NUR 4635	Approaches to Nursing IV: Community Nursing	2
NUR 4635L	Approaches to Nursing IV: Community Nursing Clinical	3
NUR 4945L	Approaches to Nursing V: Leadership Practicum	5
Nursing Elective		2-3

A laboratory fee will be assessed for the following courses: NUR 3065C, NUR 3115L, NUR 3535L, NUR 3259L; NUR 4357L, NUR 4457L, and NUR 4635L.

Bachelor of Science in Nursing (BSN) - RN to BSN

Admission Requirements for Undergraduate Transfer:

Degree seeking applicants with fewer than 60 semester hours of transfer credit must satisfy the same admission requirements as beginning freshmen.

For admission to the upper division RN-BSN program a student must be licensed by the State of Florida as a Registered Nurse (RN). Additionally, the applicant must have met the following requirements plus having achieved passing scores on the CLAST examination.

1. Completed at least 60 semester hours of academic course work with a GPA of at least 2.0 from a regionally accredited college or university. International students must submit a minimum score of 500 on the Test of English as a Foreign Language (TOEFL).

Graduates of diploma nursing programs who do not have transferable college credit will be required to complete the lower division credit requirements.

Advanced Placement and Progression of RNs

Each applicant's educational record is individually evaluated by the School of Nursing. To progress through the curriculum, the RN must successfully complete prerequisite, co-requisite and required courses recommended in the curriculum plan in effect upon admission. Transition to Professional Nursing and Professional Nursing I, and II may be taken while completing pre-requisites. Advanced placement in both nursing and non-nursing courses is facilitated by earning credits through examination, i.e., challenge or equivalency exams such as CLEP or ACT/PEP. Any RN student may elect to complete a course by matriculation in the nursing course rather than taking the challenge examination. It is possible to complete the nursing sequence in one year of full-time study after all prerequisites and challenge courses have been completed and the RN has been fully admitted to the program.

Advanced Placement and Progression of RNs by Matriculation and/or Equivalency Examination (E.E.)

The BSN degree requires 123 semester hours of credit for completion. In addition to 60 transferable lower division semester hour credits, the degree requirements include a 25 semester-hour core, a 30 semester-hour clinical proficiency evaluation (completed by the ACT-PEP equivalency exams). 3 semester hours of Statistics, 8-10 semester hours of a

foreign language and 5 semester hours of electives.

Curriculum

Level I:

NUR 3055	Transition to Professional Nursing	3
NUR 3065C	Client Assessment	3
NUR 3825	P.N. I: Socialization	3

Level II:

STA 1013	Statistics	3
NUR 3255	Adult/Gerontological (E.E.)	12
NUR 3535	Psychosocial (E.E.)	6
NUR 3827	P.N. II: Leadership	3
NUR 4357	Childrearing (E.E.)	6
NUR 4457	Childbearing (E.E.)	6

Level III:

NUR 4165	P.N. III: Research	3

Level IV:

NUR 4635	Community Health	2
NUR 4635L	Community Health Clinical	3
NUR 4945L	Practicum	5
Total number of credits earned by equivalency examination (E.E.)		30

See University catalog/nursing advisor for pre-and-co-requisite courses.

Course Descriptions

Definition of Prefixes

NSP - Nursing Special Courses; NUR - Nursing Practice and Theory
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

NUR 3055 Transition to Professional Nursing (3). The role of the professional nurse is explored in applying the nursing process in assisting individuals and/or families with adaptation to potential and actual stressors. Prerequisite: Florida RN license. (F,S,SS)

NUR 3065C Approaches to Nursing I B: Client Assessment (3). The assessment and evaluation of physiological and psychosocial stressors of the individual as client is emphasized. Prerequisite: Admission to major. (F,S,SS)

NUR 3115 Approaches to Nursing IA: Foundations of Nursing (4). Introduction to the nursing process in assisting individuals with adaptation to potential and actual stressors which impact basic needs. Prerequisite: Admission to major. Corequisite: NUR 3115L. (F,S)

NUR 3115L Approaches to Nursing IA: Foundations of Nursing Clinical (3). In the clinical area, the nursing process is applied in assisting individuals with adaptation to potential and actual stressors which impact basic needs. Prerequisite: Admission to major. Corequisite: NUR 3115. (F,S)

NUR 3125 Pathophysiologic Basis for Nursing Practice (3). The body's adaptive responses to physiological stressors are presented as a base for assessment, nursing diagnosis, interventions and evaluations. Prerequisite: NUR 3065C.

NUR 3148 Pharmacologic Basis for Nursing Practice (3). The body's adaptive responses to selected pharmacological agents are presented as a basis for assessment, nursing diagnosis, interventions, and evaluations. Prerequisite: NUR 3065C. (F,S)

NUR 3192C Emergency Measures in Selected Health Crises (1). Emergency measures in selected health crises using CPR and preventive techniques. Prerequisite: Permission of the instructor.

NUR 3255 Introduction to Critical Care Concepts for the Adult Gerontological Client (3). A study of treatments used in practice of critical care nursing. Emphasis on assessment, trauma, life support, interventions, management and professional issues. Prerequisites: NUR 3115 and NUR 3259.

NUR 3259 Approaches to Nursing IIA: Adult/Gerontological Physiological Nursing (4). The nursing process is applied in assisting adult/gerontological clients with adaptation to potential and actual physiological stressors. Prerequisites: NUR 3115, NUR 3115L. Corequisites: NUR 3259L, NUR 3148, NUR 3125. (F,S)

NUR 3259L Approaches to Nursing IIA: Adult/Gerontological Physiological Nursing Clinical (6). In the clinical area, the nursing process is applied in assisting adult/gerontological clients with adaptation to potential and actual physiological stressors. Prerequisites: NUR 3115, NUR 3115L. Corequisite: NUR 3259, NUR 3148, NUR 3125. (F,S)

NUR 3535 Approaches to Nursing IIB: Psychosocial Nursing (3). The nursing process is applied in assisting adult/gerontological clients with adaptation to potential and actual psychosocial stressors. Prerequisites: NUR 3115, NUR 3115L, NUR 3255, NUR 3255L. Corequisite: NUR 3535L

NUR 3535L Approaches to Nursing IIB: Psychosocial Nursing Clinical (3). In the clinical areas, the nursing process is applied in assisting adult/gerontological clients with adaptation to potential and actual psychosocial stressors. Prerequisites: NUR 3115, NUR 3115L, NUR 3255, NUR 3255L. Corequisites NUR 3535.

NUR 3596 Crisis Intervention and Nursing (3). This course examines the crisis state, what it is, when it occurs and how the nurse can aid the individual, family or group in crisis.

NUR 3825 Professional Nursing I: Socialization (3). Socialization into the role of professional nursing is introduced with emphasis on responsibilities as a direct care provider, teacher learner, and collaborator. Prerequisite: Admission to major. (F,S,SS)

NUR 3827 Professional Nursing II: Leadership (3). The client advocate, leadership and change agent roles of the professional nurse are analyzed in a variety of health care settings. Prerequisite: NUR 3825. (F,S,SS)

NUR 4040 Transcultural Issues and the Nurse (2). The course is designed to guide the student into direct relationships with individuals of ethnic and racial differences, and to facilitate the development of a therapeutic relationship.

NUR 4165 Professional Nursing III: Research (3). Interrelationship of problems solving, decision making, change and the nursing process are explored in identifying the role of the professional nurse as research consumer. Prerequisite: Statistics course. (F,S,SS)

NUR 4357 Approaches to Nursing IIIB: Childrearing (3). The nursing process is applied in assisting childrearing families as clients with adaptation to potential and actual stressors. Prerequisites: NUR 3259, NUR 3259L, NUR 3535, NUR 3535L. Corequisite: NUR 4357L. (F,S)

NUR 4357L Approaches to Nursing IIIB: Childrearing Family Clinical (3). In the clinical area, the nursing process is applied in assisting childrearing families as clients with adaptation to potential and actual stressors. Prerequisites: NUR 3259, NUR 3259L, NUR 3535, NUR 3535L. Corequisite: NUR 4357. (F,S)

NUR 4457 Approaches to Nursing IIIA: Childbearing (3). The nursing process is applied in assisting childbearing families as clients with adaptation to potential and actual stressors. Prerequisites: NUR 3259, NUR 3259L, NUR 3535, NUR 3535L. Corequisite: NUR 4457L. (F,S)

NUR 4457L Approaches to Nursing IIIA: Childbearing Family Clinical (3). In the clinical area, the nursing process is applied in assisting childbearing families as clients with adaptation to potential and actual stressors. Prerequisites: NUR 3259, NUR 3259L, NUR 3535, NUR 3535L. Corequisite: NUR 4457. (F,S)

NUR 4635 Approaches to Nursing IV: Community Nursing (2). The nursing process is applied in assisting individuals, families and communities as clients with adaptation to potential and actual stressors. Prerequisites: NUR 4457, NUR 4457L, NUR 4357, NUR 4357L. Corequisite: NUR 4635L. (F,S,SS)

NUR 4635L Approaches to Nursing IV: Community Nursing: Clinical Experience (3). In the clinical area, the nursing process is applied in assisting individuals, families, and communities as clients with adaptation to potential and actual stressors. Prerequisites: NUR 4457, NUR 4457L, NUR 4357, NUR 4357L. Corequisite: NUR 4635. (F,S,SS)

NUR 4905 Independent Study in Nursing (1-5). Faculty supervised introduction to problems in nursing in accord with the student's special interest.

NUR 4945L Approaches to Nursing V: Leadership Practicum (5). Transition from student to graduate role is provided through leadership experience which allows synthesis of knowledge, skills, and understanding. Assessment of nursing care modalities is emphasized. (F,S,SS)

NUR 4947 Directed Field Experience in Nursing (3). Application and refinement of nursing in a clinical specialty area. Prerequisites: Permission of the instructor.

Occupational Therapy

Pamela Shaffner, *Clinical Associate Professor and Chairperson*
Alma Abdel-Moty, *Clinical Assistant Professor and Undergraduate Coordinator*
Elise Bloch, *Clinical Assistant Professor*
Suzanne D'Agati, *Assistant Professor*
Gail Ann Hills, *Professor and Graduate Coordinator*
Susan Kaplan, *Associate Professor*
Ann Marie Knecht, *Clinical Assistant Professor and Clinical Coordinator*
Paula Lambertson, *Visiting Clinical Assistant Professor*
James Mills, *Clinical Associate Professor*
Patricia Scott, *Associate Professor*

Occupational therapy is a health profession concerned with promoting the quality of life of individuals. Therapeutic techniques are directed toward restoration, reinforcement and enhancement of participation in life task activities. Occupational therapy may be indicated for persons whose life has been interrupted by disease or injury, or those who suffer from developmental delays or problems associated with aging.

The occupational therapist assesses the individual's abilities to carry out tasks and activities necessary for productive living. Working collaboratively with the client and considering his/her personal goals, lifestyle and environment, the therapist develops an intervention program designed to help restore the greatest possible functional capacity. During the treatment or rehabilitation process, the client actively engages in a directed program of purposeful, meaningful activities designed to increase his or her level of functioning. The occupational therapist works collaboratively with the client, other health professionals on the health care team, and community agency personnel. Occupational therapists serve a wide variety of individuals in all age ranges and work in settings such as community agencies, sheltered workshops, hospitals, schools, extended care facilities, and rehabilitation centers. There is an increasing demand for occupational therapists and excel-lent opportunities exist for career advancement.

Qualities that are necessary to be a successful therapist include the ability to work with others, look at the totality of human performance, think creatively, problem solve, and direct the actions of others.

Bachelor of Science in Occupational Therapy

Degree Program Hours: 128

In order to be admitted to the program in occupational therapy, applicants must; a.) meet the requirements for admission to the University; b.) have a cumulative GPA of 3.0 or higher; c.) have completed required prerequisites and 60 semester hours of acceptable academic credit; d.) complete a total of eight hours of observation in two different OT settings (each observation experience must be four hours). Applicants must apply to both the Office of Admissions and the Department of Occupational Therapy. Applicants who are already registered at FIU as degree students must mail an application to the Occupational Therapy Department after December 1, but must be postmarked no later than January 15th. Enrollment is limited and one class is selected each academic year to begin Fall semester. The average admitting grade point for admission is over 3.3. Students are selected based on GPA and the strength of their academic record, including a strong liberal arts preparation and the required prerequisites.

Students who already hold a bachelor's degree in a field other than occupational therapy may be eligible for the master's degree program (see graduate catalog).

Note: Students must contact the Occupational Therapy Department directly for all applications and materials before December 15. Deadline for applying is January 15th.

Advising

The admission line (305) 348-2263 was developed to answer many of the most commonly asked questions. All applicants should first call this number and listen to the message.

Group advising sessions are held every two weeks in the O.T. department. Call (305) 348-2922 to find out the dates, and to reserve a space. If you have specific questions related to your application, the advisor will answer them during the session. All applicants who live in Miami-Fort Lauderdale area are expected to attend an advising session. Students who live outside the area can call the department and ask to speak with an advisor.

Accreditation Status

The Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education

(ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, Md 20824-1220. AOTA's phone number is (301) 652-AOTA or (800) 377-8555 (TDD). Graduates of the program will be able to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination.

Lower Division Preparation

Required Courses

Biology and Lab	4
Physics and Lab **or** Chemistry and Lab (only one required)	4
General Psychology	3
Human Growth and Development	3
One additional Psychology course (not personal adjustment)	3
Statistics	3
Sociology **or** Anthropology	3
Physiology (3 credits)[1] **or** Human Anatomy and Physiology I and II	6

[1]Students who have completed Anatomy/Physiology I and II with a lab have met the prerequisites for Biology with lab and Physiology.

To be admitted into the program, FIU undergraduates must have met all the lower division requirements including CLAST, and completed 60 semester hours.

Upper Division Program

All courses in the upper division are required including fieldwork. Fieldwork does not follow the traditional academic calendar and may extend beyond the semester's end. Level II fieldwork must be completed within 24 months of the didactic course work.

Required Courses

Junior Year

Fall Semester: (15 credits)

OTH 3000	Foundations of Occupational Therapy	3
OTH 3210	Occupational Development Throughout the Lifespan	3
OTH 3122	Therapeutic Skills in OT I	1
OTH 3122L	Therapeutic Skills in OT Lab I	2
OTH 3760	Evaluation & Research in OT I	2
ZOO 3731	Human Anatomy	3
ZOO 3731L	Human Anatomy Lab	1

Spring Semester: (14 credits)

OTH 3216	Occupational Development Throughout the Lifespan II	3
OTH 3416	Mechanisms of Disease & Dysfunction in OT	3
OTH 3413	Applied Kinesiology	3
OTH 3413L	Applied Kinesiology Lab	1
ZOO 4743	Neuroscience	4

Summer Semester: (2 credits)

OTH 3815	Fieldwork Experience Level I (4 weeks)	2

Senior Year

Fall Semester: (13credits)

OTH 4504	Neuromotor Approaches in OT I	4
OTH 4423	Biomechanical & Rehabilitative Approaches in OT I	2
OTH 4423L	Biomechanical & Rehab Approaches in OT Lab	1
OTH 4322	Neuropsychiatric & Cognitive Approaches in OT I	3
OTH 4123	Therapeutic Skills in OT II	1
OTH 4123L	Therapeutic Skills in OT II Lab	2

Spring Semester: (14 credits)

OTH 4426	Neuromotor Approaches in OT II	3
OTH 4426L	Neuromotor Approaches in OT II Lab	1
OTH 4424	Biomechanical & Rehabilitative Approaches in OT II	2
OTH 4424L	Biomechanical & Rehabilitative Approaches in OT II Lab	1
OTH 4323	Neuropsychiatric Cognitive Approaches in OT II	3
OTH 4701	Professional Issues in OT	2
OTH 4775	Evaluation & Research in OT II	2

Summer Semester: (5 credits)

OTH 4850 or OTH 4851	Fieldwork Experience Level II	5

Fall Semester: (5 credits)

OTH 4850 or OTH 4851	Fieldwork Experience Level II	5

Course Descriptions

Definition of Prefixes

OTH-Occupational Therapy, Majors Only

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

OTH 3000 Foundations of Occupational Therapy (3). History and theory of occupational therapy, including scope of practice and introduction to clinical reasoning. (F)

OTH 3122 Therapeutic Skills in Occupational Therapy I (1). Presents the use of self and the use of occupation as therapeutic mediums. Communication skills and skills in analyzing, adapting, and grading activities are emphasized. (F)

OTH 3122L Therapeutic Skills in Occupational Therapy I Lab (2). Lab experiences enable practice of skills in therapeutic communication, activity analysis and adaptation, and beginning group process. (F)

OTH 3210 Occupational Development Throughout the Lifespan I (3). Investigates how humans shape and are shaped by their activities and environment. Examines normal occupational development in infants, children and adolescents. Prerequisite: DEP 3000 or equivalent. (F)

OTH 3216 Occupational Development Throughout the Lifespan II (3). Examines normal occupational development I young, middle-aged and older adults. Analysis of occupations and personal and environmental factors that influences occupational competence. Prerequisite: DEP 3000 or equivalent. (S)

OTH 3413 Applied Kinesiology (3). A study of the anatomical, physiological and biomechanical principles of human motion with an emphasis on clinical application. (S)

OTH 3413L Applied Kinesiology Lab (2). Laboratory to accompany OTH 3413 (S)

OTH 3416 Mechanisms of Disease and Dysfunction (3). A study of mechanisms of disease and pathophysiological processes that occur in the human body. State of the art diagnostic techniques, medical advances, and methods of disease prevention are discussed. Prerequisite: ZOO 3731 and laboratory, PCB 3702, or equivalent. (S)

OTH 3760 Evaluation and Research in Occupational Therapy I (2). Introduces concepts of evaluation and testing in occupational testing in occupational therapy and develops skills necessary to be a research consumer. (F)

OTH 3815 Field Work Experience Level I (2). Pre-clinical experience in an approved training center. (SS)

OTH 4109 Technological Applications in Occupational Therapy (1). Overview of technological applications in clinical practice with emphasis on adaptations for the physically disabled client.

OTH 4109L Technological Applications in Occupational Therapy Lab (1). Laboratory experience with various technological applications used in occupational therapy practice.

OTH 4123 Therapeutic Skills in Occupational Therapy II (1). Studies the use of self and group activities to evaluate and treat individuals with psychiatric disorder or other functional limitations. (F)

OTH 4123L Therapeutic Skills in Occupational Therapy II Lab (2). Application and practice of therapeutic communication, activity analysis and adaptation, and group process skills through role-playing and simulated treatment situations. (F)

OTH 4322 Neuropsychiatric and Cognitive Approaches in Occupational Therapy I (3). Students development proficiency in OT evaluation and treatment techniques for individuals with cognitive and neuropsychiatric disorder. Selected disorders are studied. (F)

OTH 4323 Neuropsychiatric and Cognitive Approaches in Occupational Therapy II (3). Students develop proficiency in OT evaluation and treatment techniques for individuals with cognitive and neuropsychiatric disorder. Selected disorders are studied. (S)

OTH 4423 Biomechanical and Rehabilitative Approaches in Occupational therapy I (2). Studies the application of Biomechanical and rehabilitative approaches to selected physical disabilities. Case studies present specific evaluation and treatment techniques. Prerequisite: OTH 3413. (F)

OTH 4423L Biomechanical and Rehabilitative Approaches in Occupational Therapy I Lab (1). Lab experiences allow students to practice Biomechanical and rehabilitative evalu-ation and treatment strategies in sim-ulated treatment situations. Prerequisite: OTH 3413L. (F)

OTH 4424 Biomechanical and Rehabilitative Approaches in Occupation Therapy II (2). Continued study of the application of biomechanical and rehabilitative approaches to selected physical disabilities. Case studies present specific evaluation and treatment techniques. (S)

OTH 4424L Biomechanical and Rehabilitative Approaches in Occupational Therapy II Lab (1). Provides students with practical experiences in evaluation and treatment techniques for selected physical disabilities. (S)

OTH 4426 Neuromotor Approaches in Occupational Therapy II (3). Foundational knowledge of OT evaluation and treatment of neurologically impaired adults. (S)

OTH 4426L Neuromotor Approaches in Occupational Therapy II Lab (1). Applications of theoretical knowledge to clinical problems in the occupational therapy evaluation and treatment of neurologically impaired adults. (S)

OTH 4504 Neuromotor Approaches in Occupational Therapy (4). Provides theoretical basis for treatment of children with neuromotor disorders. Develops evaluation and treatment planning skill through extensive pediatric casework.

OTH 4701 Professional Issues in Occupational Therapy (2). Study of professional issues in OT in relation to administration such as roles, functions, licensing, certification, documentation, ADA. (S)

OTH 4775 Evaluation and Research in Occupational Therapy II (2). Presents research concepts and strategies. Emphasis on evaluation and research activities that can be conducted in clinical settings and are relevant to clinical practice. Prerequisite: STA 3122 and evaluation and research in OT 1. (S)

OTH 4850 Field Work Experience (5-12). Three months internship in a clinical setting. (F,S,SS)

OTH 4851 Field Work Experience (5-12). Three months internship in a clinical setting. (F,S,SS)

OTH 4852 Field Work Experience (1-20). Internship in a specialized treatment area. (F,S,SS)

OTH 4904 Independent Study (VAR). To be arranged with instructor according to the student's specialty. (F,S,SS)

Physical Therapy

Colleen Rose St. Prix, *Associate Professor and Chair*
Steven Bernstein, *Clinical Assistant Professor*
Helen Z. Cornely, *Assistant Professor*
Burton J. Dunevitz, *Associate Professor*
Leonard Elbaum, *Associate Professor*
Edith Einspruch, *Clinical Associate Professor and Clinical Coordinator*
Ralph Garcia, *Visitng Professor*
Lori Gusman, *Clinical Assistant Professor*
Awilda R. Haskins, *Associate Professor*
Joyce Maring, *Clinical Assistant Professor*

Physical Therapy is a health profession whose primary purpose is the promotion of optimal human health and function through the application of scientific principles to prevent, identify, assess, correct or alleviate acute or prolonged movement dysfunction. Physical therapists examine, treat and instruct individuals with physical disability, movement dysfunctions, bodily malfunctions, and pain from injury, disease and any other physical or mental conditions. Physical therapists administer, interpret and evaluate tests and measurements of body functions and structures; plan, administer, evaluate, and modify treatment and instruction, including the use of physical measures, activities, and devices for preventive and therapeutic purposes; and provide consultative, educational and other advisory services for the purpose of reducing the incidence and severity of physical disability, movement dysfunction, bodily malfunction and pain.

The Department of Physical Therapy offers two programs: an undergraduate program and a graduate program. The undergraduate program leads to a Bachelor of Science degree and is an entry level program into the profession. The graduate program leads to a Master of Science in Physical Therapy and is designed for physical therapists wishing to pursue an advanced degree.

Bachelor of Science in Physical Therapy

Degree Program Hours: 135

The undergraduate program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association, a specialized accrediting body recognized by the Commission on Recognition of Post-Secondary Accreditation and the United States Department of Education. The emphasis is placed upon a student-centered approach whereby individuals progress through a variety of learning experiences designed to develop their evaluative and applied therapeutic skills in the treatment of musculoskeletal, neurologic, cardiovascular, and pulmonary disorders.

The undergraduate students receive experiential and didactic instruction from clinical physical therapists, physicians, and other medical professionals. Clinical education is conducted in accredited centers throughout the United States.

Graduates of the entry level program are prepared to assume employment in general hospitals, rehabilitation centers, private clinics, home health care facilities, school systems, sports medicine units, and in the self-employed sector.

Students who apply for admission to the undergraduate program must meet the physical therapy prerequisites and the general education requirements of the University. Acceptance must be determined both by the University and the Physical Therapy Department. Enrollment is limited and admission is selective.

Note: Students must contact the Physical Therapy Department directly for all applications and information materials before December 15. Deadline for receiving P.T. applications is February 15. Deadline for applying to FIU is January 15. Classes are selected in April to commence course work in June.

Lower Division Preparation

At least 60 semester hours of an acceptable level of college credit work; one semester of statistics, one semester of human physiology and two semesters of chemistry plus labs and the following prerequisite courses: at least one academic year of science course work (including laboratory) in each of the areas of biology/zoology (Human or Vertebrate Anatomy is recommended), and physics, Human Growth and Development and one psychology or one sociology (a course on aging is recommended); a minimal GPA average of 2.75 in the prerequisite courses and a minimal overall GPA of 2.75 by December 31 of the year prior to the anticipated admission, or attainment of an overall GPA of less than 2.75, but with a prerequisite GPA of 3.3 or higher; completion of at least 200 clock hours of work in, observation of, or interviews with personnel in physical therapy clinics. The wider the variety of experience, the better qualified the candidates become.

To be admitted into the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

At least 20 hours of prerequisites must be completed before December 31. All general education and prerequisites must be completed no later than the Spring semester.

Upper Division Program

Required Courses

Junior Year

PHT 3002	Foundations of Physical Therapy	3
PHT 3122	Clinical Kinesiology I	3
PHT 3122L	Clinical Kinesiology Laboratory	1
PHT 3123	Clinical Kinesiology II	3
PHT 3133	Musculoskeletal Evaluation	3
PHT 3133L	Musculoskeletal Evaluation Lab	1
PHT 3134	Case Management in Orthopedics	1
PHT 3216	Treatment of Pain	3
PHT 3216L	Electrotherapy Lab	1
PHT 3222	Therapeutic Exercise	3
PHT 3222L	Therapeutic Exercise Lab	1
PHT 3258	Clinical Procedures	3
PHT 3258L	Clinical Procedures Lab	1
PHT 3316	Orthopedics	3
PHT 3813	Clinical Internship	3
ZOO 3733	Gross Anatomy I	3
ZOO 3733L	Gross Anatomy Lab I	1
ZOO 3734	Gross Anatomy II	3
ZOO 3734L	Gross Anatomy Lab II	1

Senior Year

	in PT	1
PHT 4160	Anatomy of Neurological Dysfunction	3
PHT 4233	Neurohabilitation	3
PHT 4233L	Neurohabilitation Lab	1
PHT 4234	PT Management of the Adult with Neurological Dysfunction	3
PHT 4234L	PT Management of the Adult with Neurological Dysfunction	1
PHT 4300	Physical Therapy and Human Disorders	3
PHT 4313	Evaluation of Neurological Dysfunction	3
PHT 4601	Independent Research	

PHT 4710	Physical Rehabilitation Assessment and Treatment I	3
PHT 4710L	Physical Rehabilitation Assessment and Treatment Lab I	1
PHT 4711	Physical Rehabilitation Assessment and Treatment II	3
PHT 4711L	Physical Rehabilitation Assessment and Treatment Lab II	1
PHT 4826	Senior Clinical Internship I	3
PHT 4827	Senior Clinical Internship II	3
PHT 4828	Senior Clinical Internship III	4
PHT 4933	Case Management In Neurological Dysfunction	1

Course Descriptions

Definition of Prefixes

PCB and ZOO - Biological Sciences;
PHT - Physical Therapy
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

PHT 3002 Foundations of Physical Therapy (2). Ethical, legal, and practice issues of physical therapy, management of physical therapy delivery systems, current health trends, and an introduction to research techniques will be covered. Prerequisite: Admission to Physical Therapy program.

PHT 3122 Clinical Kinesiology I (3). An introduction to clinical kinesiology with an emphasis on normal movement. Topics include human biomechanics, individual muscles and joints, analysis of whole-body movements and gait. Prerequisites: For fully admitted PT majors or by permission of the instructor. (F)

PHT 3122L Clinical Kinesiology Lab (1). Laboratory experiences in identifying and palpating the various components of the human musculoskeletal system while the body is at rest and in motion. (F)

PHT 3123 Clinical Kinesiology 2 (3). Presentation of clinical kinesiology with emphasis on abnormal movement. Topics include orthopedic, neurological and developmental movement disorders; techniques of movement analysis used in the clinic and research lab. Prerequisites: PHT 3122 and PHT 3122L. (S)

PHT 3123L Clinical Kinesiology 2 Lab (1). Laboratory course accompanies PHT 3123. Observation and Lab assisted analysis of human walking. Hands-on application of gait training techniques. Corequisite: PHT 3123.

PHT 3133 Musculoskeletal Evaluation (3). Theory and fundamentals of goniometry, joint mobilization, muscle testing, x-ray identification, and posture and gait evaluation. Prerequisites: PHT 3122, 3122L, and a course in Human Dissection Anatomy. Corequisite: PHT 3133L. (S)

PHT 3133L Musculoskeletal Evaluation Lab (1). Laboratory practice in applied goniometry, joint mobilization, muscle testing, x-ray identification and posture and gait evaluation. (S)

PHT 3134 Case Management in Orthopedics (1). A seminar class wherein students are assigned a clinical orthopedic problem and evaluate, goal set, treatment plan and role play the treatment application. Prerequisites: PHT 3122, 3122L, 3133, 3133L, 3222, 3222L, 3310. (SS)

PHT 3215 Physical Agents (3). Application of current theories of the causes and management of acute and chronic pain to the use of electrotherapeutic modalities in physical therapy. Prerequisites: PHT 3258, PHT 3258L, and PHT 3222. Corequisite: PHT 3216L. (SS)

PHT 3215L Physical Agents Lab. (1). Laboratory experience to develop competency with electrotherapeutic modalities in the treatment of pain. Includes low volt and high volt current, TENS, ultrasound, diathermy, iontophoresis, biofeedback. Corequisite: PHT 3216. (SS)

PHT 3222 Therapeutic Exercise (3). The principles and rationale for basic therapeutic exercise procedures are presented in lecture format. Prerequisites: PHT 3122, PHT 3258. Corequisite: PHT 3133. (S)

PHT 3222L Therapeutic Exercise Lab (1). Laboratory experiences provide practice and evaluation in techniques of applying the principles of therapeutic exercise. Corequisite: PHT 3222. (S)

PHT 3258 Clinincal Procedures (3). A lecture format is used to study the scientific rationale for basic physical therapy procedures including vital signs measurement, massage, and superficial heat. Prerequisite: Physical Therapy majors only. (F)

PHT 3258L Clinical Procedures Lab (1). Laboratory experience and evaluation of skills in basic physical therapy procedures including vital signs measurement, massage, and superficial heat. Corequisite: PHT 3258. (F)

PHT 3316 Orthopedics (3). Multimedia lectures and patient case studies presented on the evaluation and management (surgical and non-surgical) of the orthopedic patient, correlated with laboratory practice in evaluative and treatment skills. Prerequisites: ZOO 3734, ZOO 3734L, ZOO 3733, ZOO 3733L, PHT 3122, PHT 3122L. (S)

PHT 3316L Orthopedics Lab (1).

PHT 3813 Clinical Internship (3). Supervised full-time clinical experience, designed to offer the student experience in patient care, particularly musculoskeletal evaluation, application of basic physical techniques, and orthopedic planning and implementation. Prerequisite: Junior standing in P.T. program. (SS)

PHT 3941 Orientation to Clinical Internship I (0-3). Supervised full-time clinical experience for physical therapy majors on extended programs of study. Designed to orient the student to physical therapy clinical practice. Prerequisite: Junior standing in the PT program.

PHT 4160 Anatomy of Neurological Dysfunction (3). Study of the structure and functions of those components of the central and peripheral nervous systems as they govern normalcy and evidence pathology. Prerequisites: ZOO 3733, ZOO 3733L, ZOO 3734, ZOO 3734L, or two semesters gross anatomy with dissection. Senior standing for Physical Therapy majors only. (F)

PHT 4233 Neurohabilitation (3). Application of various exercise techniques to the treatment of individuals with neurodevelopmental deficits. Prerequisite: Majors only. Corequisite: PHT 4233L. (S)

PHT 4233L Neurohabilitation Lab (1). Laboratory and field experiences will be utilized for practice of neurohabilitation techniques. Corequisite: PHT 4233. (S)

PHT 4234 PT Management of the Adult with Neurological Dysfunction (3). A lecture/discussion format is used to study various neurophysiological theories and principles which are

applied in rehabilitation. Prerequisite: Majors only. Corequisite: PHT 4234L. (F)

PHT 4234L PT Management of the Adult with Neurological Dysfunction Lab (1). Laboratory experiences in application of the neurorehabilitation lecture material from PHT 4234. Corequisite: PHT 4234. (F)

PHT 4305 Physical Therapy and Human Disorders (3). Study of systemic and organ-specific disease and the related medical terminology as they relate to the practice of physical therapy; explores the current literature in selected disease topics. Prerequisite: Course in medical terminology. (F)

PHT 4313 Evaluation of Neurological Dysfunction (3). Emphasizes evaluation differential diagnosis, goal setting, and treatment planning for patients with neurologic disability. Presented by neurologists and by physical therapists who provide clinical experience in neurologic evaluation. Prerequisites: PHT 4160 and a course in Human Dissection Anatomy. (S)

PHT 4600 Physical Therapy Research Seminar (1). Course content includes a review of research-related concepts including experimental design and statistical analysis, an introduction to techniques used in physical therapy research, and a survey of current research in physical therapy. Prerequisite: Senior standing in Physical Therapy. (F)

PHT 4710 Physical Rehabilitation Assessment and Treatment I (3). Explores evaluation and treatment planning for patients with spinal cord injuries and amputations. Prerequisite: Senior standing PT majors only. Corequisite: PHT 4710L. (F)

PHT 4710L Physical Rehabilitation Assessment and Treatment I Lab (1). Lab practice in evaluation and treatment of patients requiring an orthosis/prothesis and spinal cord injured patients as well as training in w/c fitting and use. Prerequisite: Majors only. Corequisite: PHT 4710. (F)

PHT 4711 Physical Rehabilitation Assessment and Treatment II (3). This course addresses functional evaluation and treatment planning in the following areas: cardiac and pulmonary rehab, burns, oncology, work hardening, biofeed back, and home assessments. Prerequisites: PHT 4710, PHT 4710L. Corequisite: PHT 4711. (S)

PHT 4711L Physical Rehabilitation Assessment and Treatment II Laboratory (1). Provides student with lab practice in cardiac and pulmonary rehabilitation, sub-maximal stress testing, burn care, oncology, and work hardening. Prerequisites: PHT 4710, PHT 4710L. Corequisite: PHT 4711L. (S)

PHT 4826 Senior Clinical Internship I (3). Supervised full-time clinical experience, designed to afford the student the opportunity to practice total patient care, as well as administration and supervision in physical therapy. Prerequisite: Senior student standing in Physical Therapy program. (SS)

PHT 4827 Senior Clinical Internship II (3). Continuation of PHT 4826. Corequisite: PHT 4826. (SS)

PHT 4828 Senior Clinical Internship III (4). Continuation of PHT 4826 and PHT 4827. Pre- or Corequisite: PHT 4826. (F)

PHT 4905 Independent Study (1-3). The student will select a particular aspect of physical therapy or closely related subject for in-depth independent study with a faculty preceptor. Prerequisite: Junior or senior standing in PT program.

PHT 4933 Case Management in Neurological Dysfunction (1). Seminar class: students, given a problem in physical therapy diagnosis, will evaluate, determine physical dysfunction, and design a comprehensive plan of care. Prerequisite: PHT 3134.

PHT 4936 Current Topics in Physical Therapy (3). Study of a current topic or limited number of topics not otherwise presented in the curriculum. May be repeated with different subject content. Prerequisite: Senior standing. Prerequisite: Senior standing in PT program. (S)

PHT 4942 Orientation to Senior Clinical Internship I (0-3). Supervised full-time clinical experience for physical therapy majors on extended programs of study. Designed to offer the student experience in patient care in the physical therapy clinical setting. Prerequisites: Junior standing in the PT program and PHT 3813.

Certificates

Medical Laboratory Sciences

The certificate programs in Medical Laboratory Sciences will be offered to students holding a bachelor's degree in the sciences and will provide the clinical courses required for categorical certification by State and National agencies.

Eligibility Requirements

Completion of all prerequisite sciences with a cumulative GPA of 2.0 or better.

Clinical Chemistry Certificate

Pre/Corequisite Courses

Bachelors Degree in the Sciences *(including 24 semester hours of chemistry)*
- One year General Chemistry with Lab
- One year Organic Chemistry with Lab
- One semester Biochemistry

Required Courses: (16)

MLS 3038	Introduction to MLS	2
MLS 3605	Clinical Instrument-ation	2
MLS 3605L	Clinical Instrumentation Laboratory	1
MLS 4625	Clinical Chemistry Methods	4
MLS 4625L	Clinical Chemistry Methods Lab	2
MLS 4630	Advanced Clinical Chemistry	3
MLS 4820L	Clinical Practice/Chemistry	3

Clinical and Medical Microbiology Certificate

Pre/Corequisite Courses

Bachelors Degree in the Sciences
- One year General Biology with Lab
- One year General Chemistry with Lab
- One year Organic Chemistry with Lab
- One semester Biochemistry or one semester Immunology
- One semester General Microbiology with Lab

Required Courses: (15)

MLS 3038	Introduction to MLS	2
MLS 3430	Medical Parasitology	1
MLS 3430L	Medical Parasitology Laboratory	1
MLS 4405	Clinical Microbiology	4
MLS 4405L	Clinical Microbiology Laboratory	2
MLS 4461	Advanced Microbiology	3
MLS 4821L	Clinical Practice/ Microbiology	3

Hematology Certificate

Pre/Corequisite Courses

Bachelors Degree in the Sciences (including 30 semester hours of biology and chemistry)
- One year General Biology with Lab
- One year Organic Chemistry with Lab
- One year General Chemistry with Lab
- One semester Biochemistry

Required Courses: (15)

MLS 3038	Introduction to MLS	2
MLS 3038L	Introduction to MLS Techniques	1
MLS 4306	Clinical Hematology	4
MLS 4306L	Clinical Hematology Laboratory	3
MLS 4334	Clinical Coagulation	1
MLS 4334L	Clinical Coagulation Laboratory	1
MLS 4822L	Clinical Practice/ Hematology	3

Immunohematology Certificate

Pre/Corequisite Courses

Bachelors Degree in the Sciences (including 30 semester hours of biology or chemistry)
- One year General Biology with Lab
- One year General Chemistry with Lab

Required Courses (15)

MLS 3038	Introduction to MLS	2
MLS 4505	Clinical Immunology	4
MLS 4505L	Clinical Immunology Laboratory	1
MLS 4334	Clinical Coagulation	1
MLS 4535	Immunohematology	4
MLS 4535L	Immunohematology Laboratory	3
MLS 4823L	Clinical Practice/ Immunohematology	3

Health Information Management

The purpose of the certificate is to offer an ICD-9-CM Coding program for health care personnel within the community. Program of study includes basic concepts of terminology, disease processes, and patient classification systems with major emphasis on ICD-9-CM. CPT is included also.

Health Information Coding Certificate

Required Courses (18)

Prerequisites: Anatomy and Physiology

HSC 3531	Medical Terminology	3
MRE 3202	Basic ICD-9CM Coding	3
MRE 3204	Advanced ICD-9CM Coding	3
MRE 3431	Fundamentals of Medical Science I	3
MRE 3432	Fundamentals of Medical Science II	3
MRE 4203	CPT- 4 Coding and Reimbursement Issues	3

Students must complete their program of study within three years from the date of admission to the certificate program and receive a 'C' or higher in each course.

College of Health Sciences

Dean **DeLois P. Weekes**
Associate Dean **Evelyn B. Enrione**
Assistant Dean **Marta M. Medina**
Assistant Dean **Ayanna Amerigo**
Research Director **Marie-Luise Friedmann**

Chairpersons and Directors:
Dietetics and Nutrition **Michele Ciccazzo**
Health Information Management **Odalys Martinez,** *(Acting)*
Medical Laboratory Sciences **Beverly A. Warden**
School of Nursing **Veronica Conners**
Occupational Therapy **Pamela Shaffner**
Physical Therapy **Colleen Rose-St. Prix**
Public Health **Virginia McCoy**

Faculty

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Huffman, Fatma, Ph.D., R.D. *(Auburn University), Professor, Dietetics and Nutrition*

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Keppler, William J., Ph.D. *(University of Illinois), Professor, Public Health*

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Lizardo, Maria Lourdes, ARNP, Ed.D. *(Florida International University), Assistant Professor, Nursing*

Lobar, Sandra, ARNP, Ph.D. *(University of Miami), Associate Professor, Nursing*

Lowe, John, RN, Ph.D. *(University of Miami), Assistant Professor, Nursing*

Madayag, Tomas, RN, Ed.D. *(University of Sarasota), Assistant Professor, Nursing*

Magnus, Marcia H., Ph.D. *(Cornell University) Associate Professor, Dietetics and Nutrition*

Malecki, Jean, M.D., MPH, *Courtesy Professor*

Maring, Joyce R., M.S., P.T. *(Boston University), Clinical Assistant Professor, Physical Therapy*

Martinez, Odalys, B.S., R.R.A. *(Florida International University), Instructor, Health Information Management*

Martinson, Jace, RN, MSN *(University of Alaska), Instructor, Nursing*

McCoy, Virginia, Ph.D. *(University of Cincinnati), Associate Professor and Chairperson, Public Health*

Mills, James L., M.H.A., M.S.E.D., O.T.R. *(University of Southern California), Clinical Associate Professor, Occupational Therapy*

O'Hara, Peggy, Ph.D. *Courtesy Professor*

Parchment, Yvonne, ARNP, MSN *(University of Miami), Instructor, Nursing*

Patterson, Joseph, Dr. P.H. *(University of California-Los Angeles), Professor Emeritus, Public Health*

Patton, Richard, M.P.H., R.D. *(University of North Carolina), Clinical Assistant Professor, Public Health*

Phillips, Suzanne, ARNP, Ed. D. *(Florida International University), Associate Professor, Nursing*

Porter, Luz, ARNP, Ph. D. *(New York University), Professor, Nursing*

Rose-St. Prix, Colleen, MHSA, P.T. *(Florida International University), Associate Professor and Chairperson, Physical Therapy*

Scott, Patricia, Ph.D., O.T.R. *(University of Oklahoma), Associate Professor, Occupational Therapy*

Sfakianari, Eleni, M.D., MSPH, *Courtesy Professor*

Shaffner, Pamela, M.S., O.T.R. *(Nova Southeastern), Clinical Associate Professor and Chairperson, Occupational Therapy*

Shen, Patrick F., Ph.D., M.T. (ASCP) *(University of Arkansas), Associate Professor, Medical Laboratory Sciences*

Sherman, Esther, RN, MSN *(George Mason University), Instructor, Nursing*

Small, Norma, MS, RN, *(Nova Southeastern University), Visiting Instructor, Nursing*

Smith, Sylvia L., Ph.D., S.M. (AAM, ASCP) *(University of Miami), Professor, Medical Laboratory Sciences*

Stempel, Robert, Dr. P.H. *(University of California-Berkeley), Associate Professor, Public Health*

Tomchik, Robert S., M.D., MPH, *Courtesy Professor*

Warden, Beverly A., Ph.D., MT (ASCP), *(Northeastern University) Associate Professor and Chairperson, Medical Laboratory Sciences*

Weddle, Dian O., Ph.D., R.D., FADA *(University of Illinois), Associate Professor, Dietetics and Nutrition*

Wellman, Nancy S., Ph.D., R.D., FADA *(University of Miami), Professor, Dietetics and Nutrition*

Williams, Judith K., Ph.D., *Courtesy Associate Professor*

Wilson, Karline, ARNP, MSN *(University of Miami), Instructor, Nursing*

School of Hospitality Management

School of Hospitality Management

Joseph J. West, *Dean and Professor*
Lee C. Dickson, *Associate Dean and Associate Professor*
Rocco M. Angelo, *Associate Dean and Professor*
Adele E. Smith, *Assistant Dean and Associate Professor*
Sidney Beitler, *Visiting Professor*
Elio C. Bellucci, *Professor*
Stuart L. Blumberg, *Adjunct Instructor*
M. Chase Burritt, *Instructor*
Cheryl Carter, *Instructor*
Patrick J. Cassidy, *Instructor*
Percival Darby, *Assistant Professor*
Marcel R. Escoffier, *Associate Professor*
Shelley Feldman, *Adjunct Instructor*
Peter Goffe, *Associate Professor*
Fritz G. Hagenmeyer, *Professor*
Albert J. Haleblian, *Associate Professor*
T. Michael Hampton, *Associate Professor*
William M. Hansen, *Instructor*
William Hebrank, *Adjunct Instructor*
Michael E. Hurst, *Professor*
Charles L. Ilvento,*Professor*
Lendal H. Kotschevar, *Professor Emeritus*
Gerald W. Lattin, *Professor Emeritus*
James V. Marmorstone, *Adjunct Instructor*
Anthony G. Marshall, *Dean and Professor Emeritus*
Steven V. Moll, *Associate Professor and Director, Broward Program*
Elisa Moncarz, *Professor*
Michael J. Moran, *Instructor*
William J. Morgan, Jr., *Professor Emeritus*
Diann R. Newman, *Assistant Professor*
William O'Brien, *Associate Professor*
Alan J. Parker, *Professor and Director, Center for Tourism and Technology*
Nestor Portocarrero, *Professor*
Roger Probst, *Instructor*
William J. Quain, *Professor*
Joan S. Remington, *Instructor and Director, Career Placement*
J. Kevin Robson, *Associate Professor*
Donald G. Rosellini, *Visiting Associate Professor*
Kennard Rutkowski, *Academic Advisor and Instructor*
David M. Talty, *Instructor*
Mary L. Tanke, *Associate Professor*

The School of Hospitality Management offers Bachelor's and Master's degrees and Certificate Programs that combine practical experience with classroom theory to assist the student to gain the understanding, skills, and techniques needed to qualify for job opportunities, and to achieve his or her career goals in the hospitality industry.

With the cooperation of industry executives, the School has created an internship program which literally utilizes the hotels, resorts, restaurants, clubs, airlines, travel agencies, and cruise lines as practice labs for students. The advanced phase of the internship program provides each student a structured management training experience normally not available to a student until he or she has entered the industry after graduation.

An Industry Advisory Board - which includes outstanding executives in the hotel, restaurant, and tourism industries - works regularly with the faculty, staff, and students of the School to formulate and update a curriculum that is current, flexible, and related to the needs of the hospitality industry.

The School has been designated a Program of Distinction by the Florida Board of Regents.

Note: The programs, policies, requirements, and regulations listed in this catalog are continually subject to review, in order to serve the needs of the University's various publics, and to respond to the mandates of the Florida Board of Regents and the Florida Legislature. Changes may be made without advance notice. Please refer to the General Information section for the University's policies, requirements, and regulations.

Locations

The School is located on scenic Biscayne Bay at the FIU North Campus at Biscayne Boulevard (U.S.1) and Northeast 151 Street, North Miami, Florida.

The complete FIU undergraduate degree program in Hospitality Management is also available at the FIU Broward Center located in Fort Lauderdale, 2912 College Avenue, on the Central Campus of Broward Community College, Davie.

The FIU undergraduate degree program in Hospitality Management with a track in Travel and Tourism Management is available, evenings, at the Miami Dade Community College North Campus located at 11380 Northwest 27 Avenue, Miami and days at FIU North Campus. Selected courses are also presented via distance learning at the FIU University Park Campus.

Admission

Applicants to the School must submit an Application for Admission to the University and must follow the regular University admission procedures described in the Admissions section of the catalog. Applicants must be eligible for admission to the University before admission to the School. A minimum TOEFL score of 500 is required for international applicants. Students scoring below 550 on the TOEFL may be required to take a four-week intensive course in conversational English offered by the FIU English Language Institute.

Undergraduate Study

Any student who has completed two years of college (60 semester hours) may apply for admission. Full credit will be granted for both Associate in Arts and Associate in Science degrees. One may enroll on either a full-time or a part-time basis. International students must enroll full-time. Students with less than 60 transfer credits must meet freshman admission criteria.

It is not necessary to have been previously enrolled in a hotel, restaurant, or tourism program. The curriculum will provide the specialized professional education to equip the student for a career in hospitality and tourism management. Students with training in liberal arts, business, education, or technology, for example, are qualified to enroll in the program.

The School operates on a single major concept with a core of 51 semester credits required of all students and an additional 9 semester credits of hospitality management electives. Under this system, the student enjoys maximum flexibility in choosing areas of emphasis while being assured of comprehensive coverage of all areas of hospitality management.

A maximum of 60 lower division undergraduate semester credits may be transferred from a junior or community college program. More credits may be transferred from a related upper-division program at a four-year institution.

There is a requirement that all students complete at least 1000 hours of practical training work experience in the hospitality industry, in addition to the Advanced Internship of 300 hours. A minimum of 800 hours of the total

1300 hours must be completed while enrolled at FIU.

Bachelor of Science in Hospitality Management

Degree Program Hours: 120

Lower Division Preparation (60)

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program. Transfer students should complete a minimum of 60 semester hours including general education requirements. General education requirements must be completed prior to graduation from the University.

Common Prerequisite:

HFT 3000	Introduction to Hospitality Management	3

Upper Division Course Requirements: (60)

Management, Accounting, Finance, and Information Systems: (15)

HFT 3403	Management Accounting for the Hospitality Industry	3
HFT 3423	Hospitality Information Systems	3
HFT 3453	Operations Control	3
HFT 4464	Interpretation of Hospitality Financial Statements	3
HFT 4474	Profit Planning and Decision Making in the Hospitality Industry	3

Food and Beverage Management: (15)

FOS 4201	Foodservice Sanitation	3
FSS 3221C	Introduction to Commercial Food Production	3
FSS 3232C	Intermediate Quantity Food Production	3
FSS 4234C	Advanced Food Production Management	3
HFT 3263	Restaurant Management	3

Administration: (21)

HFT 3503	Hospitality Marketing Strategy	3
HFT 3603	Law for the Hospitality Industry	3
HFT 3700	Fundamentals of Tourism	3
	or	
HFT	Tourism Elective	3
HFT 4323	Hospitality Facilities Management	3
HFT	Marketing Elective	3
HFT 4221	Human Resources Management	3
	or	
HFT 4222	Human Resources Development and Training	
	or	
HFT 4224	Human Relations in Hospitality Industry	3

Note: students pick one of these three

HFT 4945	Advanced Internship in Hospitality Management	3
Electives		9

Travel and Tourism Track

Administration (9)

HFT 3000	Introduction to Hospitality Management	3
HFT 3603	Law as Related to the Hospitality Industry	3
HFT 4224	Human Relations	3

Marketing (9)

HFT 3503	Hospitality Marketing Strategy	3
HFT 4512	Hospitality Promotion Strategy	3
HFT 4524	Hospitality Sales Management	3

Operations (9)

HFT 3403	Management Accounting for the Hospitality Industry	3
HFT 3423	Hospitality Information Systems	3
HFT 3760	Transportation in the Tourism Industry	3

Tourism (24)

HFT 3713	International Travel Tourism	3
HFT 3722	Retail Travel Agency Management	3
HFT 3733	Creative Tour Packaging	3
HFT 3770	Cruiseline Operations and Management	3
HFT 4701	Introduction to Eco Tourism	3
HFT 4714	Implementation and Management of Tourism Projects	3
HFT 4735	Geography of World Tourism	3
HFT 4945	Advanced Internship[1]	3
Electives		9

(Evening program available at Miami-Dade Community college, North Campus.)

[1]1000 hours hospitality related practical training work experience required and 300 hours for Advanced Internship for a total of 1300 hours. Minimum of 800 hours must be completed while enrolled in degree program at FIU. Advanced Internship must be in a Travel/Tourism position.

Minor in Hotel/Lodging Management (18)

Required Courses

HFT 3313	Hospitality Property Management	3
HFT 3453	Operations Control[1]	3
HFT 3603	Law for the Hospitality Industry	3
HFT 4413	Lodging Systems and Procedures	3
HFT 4524	Sales Management for the Hospitality Industry	3
Elective		3

Suggested Electives

HFT 3263	Restaurant Management	3
HFT 3403	Management Accounting for the Hospitality Industry	3
HFT 3503	Hospitality Marketing Strategy	3
HFT 4323	Hospitality Facilities Management	3
HFT 4445	Hotel Computer Systems[1]	3
HFT 4464	Interpretation of Hospitality Industry Financial Statements[1]	3
HFT 4470	Resort Development	3
HFT 4474	Profit Planning and Decision-Making in the Hospitality Industry[1]	3
HFT 4512	Hospitality Promotion Strategy	3
HFT 4604	Hospitality Legislation	3
HFT 4654	Financial and Legal Aspects of Real Estate Development	3

[1]Prerequisite required

Minor in Restaurant/Foodservice Management (18)

Required Courses

FOS 4201	Sanitation in Foodservice Operations	3
FSS 3221C	Introductory Commercial Food Production	3
FSS 3232C	Intermediate Quantity Food Production[1]	3
FSS 4105	Purchasing and Menu Planning	3
	or	
HFT 3454	Food & Beverage Cost Control	3
HFT 3263	Restaurant Management	3
Elective		3

Suggested Electives

FSS 4234C	Advanced Food Production Management[1]	3
HFT 3344	Fast Food Systems Management	3
HFT 3403	Management Accounting for the Hospitality Industry	3
HFT 3434	Club Operations Management	3
HFT 3454	Food and Beverage Cost Control	3
HFT 3861	Beverage Management	3
HFT 3866	Wine Technology, Merchandising, and Marketing	3
HFT 4295	Catering Management[1]	3
HFT 4803	Noncommercial and Contract Foodservice Management	3
HFT 4805	Recreational Foodservice Management	3
HFT 4493	Foodservice Computer Systems[1]	3
HFT 4531	Food and Beverage Merchandising	3

[1]Prerequisite required

Minor in Travel and Tourism Management (18)

Required Courses

HFT 3700	Fundamentals of Tourism	3
HFT 3713	International Tourism	3
HFT 3733	Creative Tour Packaging	3
HFT 3753	Convention and Trade Show Management	3
HFT 3770	Cruiseline Operations and Management	3
Elective		3

Suggested Electives

HFT 3000	Introduction to Hospitality Management	3
HFT 3423	Hospitality Information Systems	3
HFT 3503	Hospitality Marketing Strategy	3
HFT 4524	Sales Management for the Hospitality Industry	3
HFT 3722	Retail Travel Agency Management	3
HFT 3793	Sociology of Leisure	3
HFT 4512	Hospitality Promotion Strategy	3
HFT 4701	Eco-Tourism	3
HFT 4714	Implementation and Management of Tourism Projects	3
HFT 4735	Geography for the Visitor Industry	3

(Evening program available at Miami Dade Community College, North Campus.)

Certificate Program

The School has Certificate Programs in Hotel/Lodging Management, Restaurant/Foodservice Management, and Travel and Tourism Management. Each program consists of 12 courses (36 credit hours) and has a core requirement and electives to meet the specific needs of each candidate. The programs are open to all students with a high school education and experience in the industry. The international student candidate must submit a minimum score of 500 on the TOEFL exam or its equivalent and a Declaration and Certification of Finances document.

Restaurant/Foodservice Management Certificate (36)

Note: Curriculum may be adjusted to meet the needs of students with extensive related industry experience.

Core (30)

FOS 4201	Sanitation in Foodservice Operations	3
FSS 3221C	Introductory Commercial Food Production	3
FSS 3232C	Intermediate Quantity Food Production[1]	3
FSS 4234C	Advanced Food Production Management[1]	3
FSS 4105	Purchasing and Menu Planning	3
	or	
HFT 3454	Food and Beverage Cost Control	3
HFT 3263	Restaurant Management	3
HFT 3403	Management Accounting for the Hospitality Industry	3
HFT 3503	Hospitality Marketing Strategy	3
HFT 3603	Law for the Hospitality Industry	3
HFT 4531	Food and Beverage Merchandising1	3

Electives (6)

HFT 3203	Fundamentals of Management for Hospitality Industry	3
HFT 3344	Fast Food Systems Management	3
HFT 3434	Club Operations Management	3
HFT 3454	Food and Beverage Cost Control	3
HFT 3861	Beverage Management	3
HFT 3866	Wine Technology, Merchandising, and Marketing	3
HFT 4221	Human Resources Management	3
HFT 4222	Human Resources Development and Training	3
HFT 4224	Human Relations	3
HFT 4802	Catering Management[1]	3
HFT 4803	Noncommercial and Contract Foodservice Management	3
HFT 4805	Recreational Food - Service Management	3
HFT 4493	Foodservice Computer Systems[1]	3

[1]Prerequisite required.

Hotel/Lodging Management Certificate (36)

Note: Curriculum may be adjusted to meet the needs of students with extensive related industry experience.

Core (30)

HFT 3313	Hospitality Property Management	3
HFT 3403	Management Accounting for the Hospitality Industry	3
HFT 3423	Introduction to Hospitality Information Systems	3
HFT 3453	Operations Control	3
HFT 3503	Hospitality Marketing Strategy	3
HFT 3603	Law for the Hospitality Industry	3
HFT 3753	Convention and Trade Show Management	3
HFT 4413	Lodging Systems and Procedures	3
HFT 4470	Resort Development	3
HFT 4524	Sales Management for the Hospitality Industry	3

Electives (6)

HFT 3203	Fundamentals of Management in the Hospitality Industry	3
HFT 3263	Restaurant Management	3
HFT 4323	Hospitality Facilities Management	3
HFT 3505	Buyer Behavior[1]	3
HFT 4222	Human Resources Development and Training	3
HFT 4224	Human Relations	3
HFT 4221	Human Resources Management	3
HFT 4445	Hotel Computer Systems[1]	3
HFT 4464	Interpretation of Hospitality Industry Financial Statements[1]	3

HFT 4474	Profit Planning and Decision-Making in the Hospitality Industry[1]	3
HFT 4512	Hospitality Promotion Strategy	3
HFT 4520	Personal Sales Tactics for the Hospitality Industry	3
HFT 4604	Hospitality Legislation	3
HFT 4654	Financial and Legal Aspects of Real Estate Development	3

[1]Prerequisite required.

Travel and Tourism Management Certificate (36)

Note: Curriculum may be adjusted to meet the needs of students with extensive related industry experience.

Core (30)

HFT 3423	Hospitality Information Systems	3
HFT 3503	Hospitality Marketing Strategy	3
HFT 3603	Law for the Hospitality Industry	3
HFT 3700	Fundamentals of Tourism	3
HFT 3713	International Tourism	3
HFT 3722	Retail Travel Agency Management[2]	3
HFT 3733	Creative Tour Packaging	3
HFT 4701	Eco-Tourism[2]	3
HFT 4714	Implementation and Management of Tourism Projects	3
HFT 4735	Geography for the Visitor Industry[2]	3

Electives

HFT 3000	Introduction to Hospitality Management	3
HFT 3403	Management Accounting for the Hospitality Industry	3
HFT 3505	Buyer Behavior[1]	3
HFT 3753	Convention and Trade Show Management	3
HFT 3770	Cruise Line Operations and Management	3
HFT 3760	Transportation in the Tourism Industry	3
HFT 3793	Sociology of Leisure	3
HFT 4224	Human Relations	3
HFT 4520	Personal Sales Tactics for the Hospitality Industry[1]	3
HFT 4524	Sales Management for the Hospitality Industry[1]	3
HFT 4802	Catering Management	3
HFT 4805	Recreational Foodservice Management	3
HFT 4594	Role of Market Research in Visitor Industry	3

(Evening program available at Miami-Dade Community College, North Campus.)

[1]Prerequisite required

Non-Degree Seeking Students

A number of persons currently employed in the hospitality field may not have the educational requirements to meet degree admission standards, but may be interested in enrolling in certain specific courses to improve their skills and to enhance their chances for promotion. Individuals employed in the field may register as a Non-Degree Seeking Student for a total of 15 semester hours.

Course Descriptions

Definition of Prefixes

FOS - Food Science; FSS - Foodservice Systems; HFT - Hotel, Food, Tourism;
F-Fall semester offering; S-Spring semester offering; SS- Summer semester offering.

FOS 4201 Sanitation in Foodservice Operations (3). The causes and prevention of foodborne illness are stressed. Emphasis is placed on the current problems confronting the industry, with recent food developments as they relate to sanitation. The Hazard Analysis Critical Control Point system (HACCP) is included. (F,S,SS)

FSS 1005 Introduction to the Culinary Arts (3). Principles and skills required in preparing breads, desserts, salads and entrees including theory of food production, functions and ingedients, purchasing, equipment used and sanitation will be covered.

FSS 3221C Introductory Commercial Food Production (3). An introduction to commercial food production, nutrition, standard product identification, and supervisory techniques in the area of food preparation. Includes classroom instruction, demonstrations, and actual cooking and baking of breads, pastries and desserts. (F,S,SS)

FSS 3232C Intermediate Quantity Food Production Techniques (3). An advanced commercial food production course which provides the student with the opportunity to achieve competence and to develop techniques in soups, salads, sauces, and the entrees of meat, poultry, and seafood. Prerequisite: FSS 3221C or equivalent. (F,S,SS)

FSS 3233C Institutional Foodservice Production (3). Theory and application of commercial and institutional foodservice in an industrial environment, including large scale purchasing procedure, training in large production equipment, on-the-job training. Prerequisites: FOS 3021 or FOS 4041. (SS)

FSS 3242C International Cuisine (3). An opportunity for food aficionados to explore modern interpretations of international classic cuisine. Includes lecture, demonstration and preparation of favorite international dishes from restaurant menus around the world. Open to non-majors.

FSS 3243 Basic Meat Science (3). Fundamentals of meat, poultry and seafood: quality yield, utilization of cuts, availability, costing, buying, inventorying, packaging, labor, and trends.

FSS 4105 Purchasing and Menu Planning (3). Basic information on sources, grades and standards, criteria for selection, purchasing, and storage for the major foods, including the development of specifications. Consideration of the menu pattern with particular emphasis on costing, pricing, and the work load placed on the production staff. Item analysis and merchandising features are emphasized.

FSS 4234C Advanced Food Production Management (3). A course in advanced food production and service techniques to provide the student with realistic production, service and managerial experience. Students will be rotated through production and service stations and, as managers, will be required to plan menus, supervise preparation and service, handle customer relations, and keep accurate accounting records on the profit and loss phases of the operation. Staffing, merchandising, and cost control procedures are integral parts of the course. Prerequisites: FSS 3221C and FSS 3232C. (F,S,SS)

FSS 4241C Classical Cuisine (3). Provides an opportunity for students to expand their knowledge of food preparation into the area of world-respected traditional dishes. The course includes lecture, demonstration, and actual preparation of classical dishes. Open to non-majors.

FSS 4245C Advanced Meat Science (3). An advanced course which considers the variable factors of meat, poultry, and fish utilization. Emphasis is placed upon newer techniques in purchasing, maximizing yields, and providing products in unique form. The use of TVP and other analogues is considered, as are the functions of the specialized commissary-type of meat processing plants. Guest speakers will be utilized and field trips to protein processing plants will be made to emphasize major points. Prerequisite: FSS 3243.

FSS 4431 Food Facility Layout and Design (3). Defines and explains concepts, principles, and procedures in evaluating and/or developing varied commercial foodservice facilities that will increase profit by reducing investment and operating cost and/or by increasing capacity. Actual installations are intensively reviewed. Current trends in foodservice methodology and technology are studied in detail, and foodservice equipment manufacturing processes and distribution economics are observed and evaluated. Prerequisite: HFT 4323.

HFT 1001 Careers in Hospitality Management (3). Orientation to the hospitality industry, its history, magnitude, challenges and career opportunities.

HFT 1750 Introduction to Conference & Convention Planning (3). Introductory course covering career opportunities in the conference/convention business; procedure involved in planning and marketing events. Students will plan and execute a special event.

HFT 1772 Introduction to the Cruiseline Industry (3). Introductory course focusing on the cruiseline industry, its relationship to other segments of the hospitality industry. Why cruising is the fastest growing travel industry, and career opportunities offered.

HFT 3000 Introduction to Hospitality Management (3). A survey course providing an overview of the industry, its history, problems, and general operating procedures. Operating executives from the fields of hotel, restaurant, foodservice, travel, and tourism will be featured periodically. (F,S)

HFT 3210 Fundamentals of Management in the Hospitality Industry (3). A basic course in general management concepts and practices to acquaint the student with theories and principles of organization, the tools of managerial decision-making, and the management process, with particular reference to the hospitality industry. Case studies are used.

HFT 3263 Restaurant Management (3). An analysis of the principal operating problems in the restaurant field. Procedures, approaches, and techniques of management are explored and developed as they relate to the various categories of restaurants ranging from fast food to fine dining. Industry leaders will present successful concepts of restaurant operation. (F,S)

HFT 3313 Hospitality Property Management (3). The problems of cost and operation of pest control, security, parking, general cleaning and upkeep, laundry, fire prevention, pools, tennis courts, and care of guest rooms and public space, with emphasis on equipment, personnel, and modern innovations. The housekeeping and property management function of the hotel.

HFT 3344 Fast Food Systems Management (3). A study of management systems in a wide range of fast food and quickserve food restaurants, including site criteria, design and layout, operations, marketing techniques and cost controls.

HFT 3403 Management Accounting for the Hospitality Industry (3). Introduction and practice in accounting processes, and the principles of hospitality management accounting. Prepares the student for work in advanced accounting and financial management. Required for students who have not completed an introductory accounting course. (F,S,SS)

HFT 3423 Hospitality Information Systems (3). An introduction to the general concepts and equipment that support information management by computer within the hospitality industry. Data field handling and other information management techniques are stressed. Students complete a series of assignments utilizing application programs relating to guest cycle management on the school's computerized property management system. (F,S,SS)

HFT 3277 Club Operations Management (3). Lecture, discussion, case studies, and field trips specifically designed to expose the future club manager, golf professional, and turf manager to club operations. Introduction to the uniform system of accounts for clubs, annual club studies for operating results, control systems, taxation, budgeting, and management reports. (F,S)

HFT 3453 Operations Control (3). Study of the uniform system of accounts for hotels and management tools available to control sales and expenses within hospitality operations. Detailed analysis of the responsibility centers using a cost managing approach. Case problems provide the students the opportunity to develop control systems for lodging and food service organizations. Prerequisite: HFT 3403. (F,S,SS)

HFT 3454 Food and Beverage Cost Control (3). Fundamentals of food and beverage cost controls for hotel, restaurant and food service operations. Uses the uniform system of accounts for restaurants.

HFT 3503 Hospitality Marketing Strategy (3). Examines marketing principles, theories and concepts and the use of management principles and techniques of analysis, planning, implementation and control to maximize marketing effectiveness in hospitality organizations. Stresses marketing of service. (F,S,SS)

HFT 3505 Hospitality Buyer Behavior (3). An analysis of influences on buyer and the process involved in their purchase of hospitality services and the implications for marketing/strategy design and execution. Prerequisite: HFT 3503. or equivalent.

HFT 3521 Hospitality Sales and Marketing Techniques (1). An experiential course that gives students the opportunity to practice and develop personal-selling skills by doing field sales projects for industry partners (may be repeated for up to 3 credits). Prerequisite: Permission of the instructor.

HFT 3603 Law as Related to the Hospitality Industry (3). A basic course in hotel, motel, and restaurant law emphasizing risk management and security. The student is introduced to the fundamental laws, rules, and regulations applicable to the hospitality industry. Case study approach is used

to develop an awareness and understanding of the legal problems confronting the manager and executive in policy and decision making. (F,S)

HFT 3700 Fundamentals of Tourism (3). An introduction to the broad fields of travel and tourism. Among the topics covered are cultural tourism, eco-tourism, sociology of tourism, tourism components and supply, tourism development, the economic role of tourism demand, and the marketing of tourism. (F,S)

HFT 3713 International Travel and Tourism (3). An introduction to the international scope of travel and tourism. A brief analysis of regional framework and specific regions of the world, the interrelationship between human society and the physical environment. Tourism as a factor in economic development and its cultural and sociological factors are explored. An analysis of the international organization of tourism and the facilitation procedures required for its successful implementations are highlighted.

HFT 3733 Creative Tour Packaging (3). A comprehensive study of the functions of the wholesale tour operation. Includes tour operations and development, sales methods used in selling group business, costing and contracting of group business, and in-depth study of the promotional aspects of tour packaging. (F,S,)

HFT 3753 Convention and Trade Show Management (3). A course concentrating on organizing, arranging and operating conventions, trade shows, and expositions. Emphasis is placed on the modes and methods of sales used in booking conventions and trade shows, as well as the division of administrative responsibility in their operation. (F,S)

HFT 3760 Transportation in the Tourism Industry (3). Explore relationship between tourists and modern transport providers, the impact of societal and environmental issues, the intense service nature and resulting challenges of operations and management.

HFT 3770 Cruise Line Operations & Management (3). Overview of cruise industry: it's history and evolutions, operating and marketing procedures, career opportunities, ship profiles, itineraries, and ports of call. Guest speakers and optional field trip included. (F,S)

HFT 3793 Sociology of Leisure (3). An introduction to the fundamental psychological and sociological concepts and theories as they relate to the motivation behind travel and tourism.

HFT 3861 Beverage Management (3). An introduction to the identification, use and service of wines, spirits, and other alcoholic beverages, with an in-depth analysis of the various elements of beverage operations including purchasing, control, merchandising, and bar management.

HFT 3866 Wine Technology, Merchandising, and Marketing (3). A course in oenology and the fundamentals of wine technology (viticulture and vinification methods). The major types of wine and the factors influencing their quality; principles of sensory evaluation; wine merchandising and marketing. (F,S,SS)

HFT 3900-3905 Independent Studies (VAR). With permission from the Associate Dean, students may engage in independent research projects and other approved phases of independent study. Prerequisite: 3.0 GPA. (F,S,SS)

HFT 3941 Internship in Hospitality Management (3). Practical training and experience in all the major phases of hospitality operations and visitor industry. Reports are required. Prerequisite: Permission of the instructor. (F,S,SS)

HFT 4221 Human Resources Management for Hospitality Industry (3). An indepth study of human resources management in hospitality industry designed to improve and advance student's skills through understanding of both hourly and management human resource policies, practices and procedures. Prerequsite: HFT 3000. (F,S)

HFT 4222 Human Resources Development and Training for Hospitality Industry Managers (3). A course designed to provide specific applications of proven training systems and methods for managers in the hospitality industry. The case study method will be used. Prerequisite: HFT 3000. (F,S)

HFT 4224 Human Relations in the Hospitality Industry (3). A skill based course designed to improve students' ability to manage effective relationships with hospitality employees and guests. Focuses on improving customer service and guest satisfaction. Prerequisite: HFT 3000. (F,S,SS)

HFT 4234 Union Management Relations in the Hospitality Industry (3). A comprehensive course covering labor legislation, union history, and the day-to-day administration of the labor contract. Emphasis is placed on collective bargaining and the business relationships between union and management. Prerequsite: HFT 3000.

HFT 4274 Timeshare Management (3). A comprehensive study of timeshare and vacation ownership, including legislation, legal structures, project budgeting, financing, marketing, sales and property management. Prereq-uisite: HFT 3000 and HFT 3453.

HFT 4293 Restaurant Management Seminar (3). A senior course reviewing current restaurant foodservice problems and practices, developing policies and procedures, and implementing them. Prerequisite: Permission of the instructor.

HFT 4296 Senior Seminar in Hospitality Management (3). Student groups identify and research a major problem of a hospitality enterprise. Discussions will focus on problems and solutions. Final report required. Seniors only.

HFT 4323 Hospitality Facilities Management (3). A comprehensive survey of engineering, maintenance and efficiency control in hotels, restaurants, and institutions. Prereq-uisite: HFT 3403, HFT 3453. (F,S,SS)

HFT 4343 Hotel and Restaurant Planning and Design (3). Considers analysis, evaluation, and scheduling of the economic, technical, aesthetic, and merchandising factors involved in the systematic planning, programming and design cycle for hotels and restaurants. Actual hotel and restaurant projects will serve as the basis for discussion and student project work. Prerequisite: HFT 4323.

HFT 4413 Lodging Systems and Procedures (3). Detailed study of methods used in serving guests of a hotel. Contrasts tradition with modern systems. Demonstrates state-of-art concepts. The front office department of the hotel. Prerequisite: HFT 3423 and HFT 3453.

HFT 4445 Hotel Computer Systems (3). A seminar on computer systems within the hotel industry. An intensive study of a computerized property management system. All computer applications are examined from

reservations to the back office through a series of assignments and projects. Prerequisite: HFT 3423. (F,S,SS)

HFT 4464 Interpretation of Hospitality Industry Financial Statements (3). In-depth study of hospitality industry financial statements including consideration of the significant relationships between the various accounts found on financial reports. The statement of changes in financial position is studied, emphasizing funds as a means of payment. Major emphasis is placed upon trend analysis, ratio analysis, and comparison analysis using hospitality industry annual studies. Prerequisite: HFT 3403, HFT 3453. (F,S,SS)

HFT 4470 Resort Development (3). Analysis of management systems and methods for development of full-service resorts. Comparison of specialized requirements for different types of resorts based on location, climate, activities, and life-style. Considers management responsibilities for feasibility analysis, project development, construction supervision, pre-opening requirements and operations. Prerequisite: HFT 3000 and HFT 3453. (F,S,SS)

HFT 4474 Profit Planning and Decision-Making in the Hospitality Industry (3). Study of the decision-making process involved in the development of profit plans through analysis of hospitality industry studies. The establishment of short and long term goals and the means to reach these goals through profit plans. Emphasis on pricing decisions, responsibility centers, business units, variance analysis, cost-volume profit analysis, capital budgeting, and tax considerations. Prerequisites: HFT 3403, HFT 3453, HFT 4464. (F,S,SS)

HFT 4479 Foodservice Systems Development (3). Course presenting the systems and procedures to develop a foodservice operation from concept to opening. Prerequisites: HFT 3403, HFT 3263,and HFT 3503.

HFT 4493 Foodservice Computer Systems (3). Study of computer systems in the restaurant and foodservice industry. The student is required to implement a simulated restaurant including personnel files, daily management, menu explosion and analysis, and inventory tracking. A research project will be assigned. Prerequisite: HFT 3423. (F,S,SS)

HFT 4502 Role of Market Research in Visitor Industry (3). Fundamental research methods for tourism industry: data collection, analysis, write-up, and presentation. Emphasis placed on research implication relevant to management and problem solving. Prerequisite: HFT 3503.

HFT 4503L Hospitality Marketing Management Laboratory (2). An experiential course that allows students within a team to apply ideas, theories and techniques of management to real-world business challenges (may be repeated for up to 6 credits). Prerequisites: HFT 3521.

HFT 4509 Tourism Marketing (3). Comprehensive study of strategies and advanced techniques used in tourism marketing. Guest speakers will be utilized. Marketing plan developed. Prerequisite: HFT 3503.

HFT 4508 Meetings and Show Markets (3). An in-depth analysis of the characteristics and buying behavior of meetings and show markets and the marketing strategies that can effectively attract and serve them. Prerequisite: HFT 3503.

HFT 4512 Hospitality Promotion Strategy (3). This course deals with the practical aspects of designing and implementing a hospitality advertising, public relations, and promotional program. Planning, budgeting, media, and campaign creation will be studied. Prerequisite: HFT 3503.

HFT 4514 Hospitality Marketing Strategy Case Studies (3). A case-method course in strategic marketing analysis and decision making for the hospitality services industry. Students engage in intensive class discussion and write reports on hospitality cases. Prerequisite: HFT 3503.

HFT 4520 Personal Sales Tactics for the Hospitality Industry (3). An investigation of personal selling approaches and procedures used in hospitality sales environments combined with practical application role plays and skill rehearsals. Prerequisite: HFT 3503.

HFT 4524 Sales Management for the Hospitality Industry (3). Explores innovative management techniques used in hospitality sales for effective sales development and revenue generation. Practical application, simulations, research and field study used. Prerequisite: HFT 3503. (F,S,SS)

HFT 4531 Food and Beverage Merchandising (3). An application of marketing and merchandising principles to the specific area of food and beverage for hotels and restaurants. Prerequisite: HFT 3503.

HFT 4604 Legislation and the Hospitality Industry (3). A study of the legislative requirements imposed upon hospitality industry operators. Special emphasis is placed on the minimum wage law, sales tax, uniform provision and maintenance, tip credit, and the determination of what constitutes hours worked for the various job categories, discrimination, and sexual harassment. Prerequisite: HFT 3603.

HFT 4654 Financial and Legal Aspects of Real Estate Development in the Hospitality Industry (3). A study of the legal implications and financing alternatives for development of new properties and conversions. Prerequisite: HFT 3603 and HFT 4464.

HFT 4701 Eco-Tourism (3). A study of contemporary issues pertaining to tourism based on the natural environment. Explores management strategies suitable for controlling this growing industry. Prerequisite: HFT 3000 and HFT 3700.

HFT 4714 Implementation and Management of Tourism Projects (3). Practical development, implementation, and management of tourism projects and programs with emphasis on international and developing nation situations. Prerequisites: HFT 3700 or equivalent.

HFT 4727 Travel Industry Law (3). Legal strategies, tactics and principles for the multi-faceted travel industry. Covers applicable statutes, regulations and international agreements. Prerequisite: HFT 3700.

HFT 4735 Geography for the Visitor Industry (3). In-depth study of geographical elements of worldwide travel and tourism. Introduces contemporary tourism through historical perspective. Analyzes destinations around the world including cruises. Prerequisite: HFT 3700.

HFT 4754 Exposition and Events Management (3). Comprehensive study of strategies for planning, developing and marketing public/trade show events. Prerequisite: HFT 3000, HFT 3503 or equivalent.

HFT 4785 Casino Operations Management (3). Topics include: Historical, Legal, Social and Opera-tional aspects of the casino industry; odds assessment, game types, and cash management. Paramutual wagering, casinos, and sports books examined.

HFT 4802 Catering Management (3). A study of the techniques, logistics, and responsibilities involved in the management of on-premise and off-premise, catering companies. Prerequisites: FSS 3221C, FSS 3222C and HFT 3263. (F,S)

HFT 4803 Non-Commercial and Contract Foodservice Management (3). Management of foodservice operations in noncommercial facilities, self-operated and contract-managed. Includes business and industry, health care, campus dining, correctional and foodservice vending. Prerequisite: HFT 3263.

HFT 4805 Recreational Foodservice Management (3). Methods and systems of managing foodservice operations in recreational facilities, such as stadiums coliseums, arenas, convention centers, amusement parks, pari-mutuels , state and national parks, and other recreational areas. Prerequisite: HFT 3263.

HFT 4867 Advanced Wine Technology (3). Overview of the wine business including: importers, wholesalers, growing grapes, making wine, retailing in supermarkets, restaurants, and liquor stores, analytical tastings, matching wine and food. Prerequisite: HFT 3866.

HFT 4936 Hotel Management Seminar (3). A senior course examining the power of partnerships and interrelationships between hotel/resorts and other key segments of the visitor industry (air-port, cruiseport, convention center, attractions, sport teams, and stadiums/arenas, etc.) Considers current lodging and visitor industry problems and practices, developing policies and procedures, and implementing them. Prerequisite: HFT 3000, HFT 3453 and permission of the instructor.

HFT 4945 Advanced Internship in Hospitality Management (1-3). Structured hospitality practical training work experience involving training program and job rotations not previously performed. Ten week/300 hours minimum. Report and management project required. Prerequisites: Documented completion of 1,000 hospitality related work hours of which at least 500 hours must be completed while enrolled at FIU. Permission of the instructor. (F,S,SS)

School of Hospitality Management

Dean	**Joseph J. West**
Associate Dean	**Lee C. Dickson**
Associate Dean	**Rocco M. Angelo**
Assistant Dean	**Adele E. Smith**

Faculty

Angelo, Rocco M., M.B.A. *(University of Miami), Professor, Management and Associate Dean*

Beitler, Sidney, M.S., *(Florida International University), Visiting Instructor, Hospitality Technology*

Bellucci, Elio C., J.D. *(Boston College), Professor, Law*

Blumberg, Stuart L., B.S. *(University of Florida), Adjunct Instructor, Hotel Management*

Burritt, M. Chase, B.S. *(Cornell University), Instructor, Management*

Carter, Cheryl, B.S. (*Florida International University), Instructor, Tourism*

Cassidy, Patrick J., B.S. *(Florida International University), Instructor, Wine Technology*

Darby, Percival, M.S. *(Florida International University), Assistant Professor, Management*

Dickson, Lee C., M.B.A. *(Babson College), Associate Professor, Management and Marketing and Associate Dean*

Escoffier, Marcel R., M.S. *(Florida International University), Associate Professor, Management*

Feldman, Shelley, B.S. *(Temple University), Adjunct Instructor, Foodservice Management*

Goffe, Peter, J.D. *(University of Miami), Associate Professor, Marketing*

Hagenmeyer, Fritz, G., M.A. *(Cornell University), Professor, Hotel Engineering*

Haleblian, Albert J., B.S. C.P.A. *(Cornell University), Associate Professor, Accounting and Finance*

Hampton, T. Michael, Ed.D. *(Florida International University) Associate Professor, Marketing and Management*

Hansen, William M., M.S. *(Florida International University), Instructor, Club and Catering Management*

Hebrank, William, B.S. *(University of Illinois) Adjunct Instructor, Wine Technology.*

Hurst, Michael E., M.A. *(Michigan State University), Professor, Management*

Ilvento, Charles L., M.B.A., C.P.A. *(Cornell University), Professor, Accounting and Finance*

Kotschevar, Lendal H., Ph.D. *(Columbia University), Professor Emeritus*

Lattin, Gerald W., Ph.D. *(Cornell University), Professor Emeritus*

Marshall, Anthony G., J.D. *(Syracuse University), Dean and Professor Emeritus, Law*

Marmorstone, James V., J.D., *(Loyola University), Adjustment Instructor, Timeshare Management*

Moll, Steven V., M.S. *(Florida International University), Associate Professor, Management and Director, Broward Program*

Moncarz, Elisa, B.B.A., C.P.A. *(Bernard/Baruch College, City U. of New York), Professor, Accounting and Finance*

Moran, Michael J., B.S. *(Florida International University), Instructor, Food Management*

Morgan, William J., Jr., Ph.D. *(Cornell University), Professor Emeritus*

Newman, Diann R., Ed.D. *(Nova Southeastern University), Assistant Professor, Human Relations*

O'Brien, William, M.S. *(Florida International University), Associate Professor, Information Systems Management*

Parker, Alan J., Ph.D. *(Columbia University), Professor, Information Systems Management and Director , Center for Tourism and Technology*

Portocarrero, Nestor, B.B.A. C.P.A. *(University of Miami), Professor, Accounting and Finance*

Probst, Roger, B.S. *(University of New Haven), Instructor, Food Management*

Quain, William J., Ph.D. *(University of New Orleans), Professor, Management and Marketing*

Remington, Joan S., J.D. *(Willamette College), Instructor,Tourism and Marketing, and Director, Career Placement*

Robson, J. Kevin, M.S. *(Florida International University), Associate Professor, Food Management*

Rosellini, Donald G., J.D. *(Northwestern University), Visiting Associate Professor, Management*

Rutkowski, Kennard, B.S. *(Florida International University), Instructor, Food Service Management and Academic Advisor*

Smith, Adele E., M.S. *(Auburn University), Associate Professor, Management and Assistant Dean*

Talty, David M., B.S. *(Florida State University), Instructor, Management.*

Tanke, Mary L., Ph.D. *(Purdue University), Associate Professor, Management*

West, Joseph J., Ph.D. *(Virginia Polytechnic Institute and State University), Professor, Management and Dean*

School of Journalism and Mass Communication

School of Journalism and Mass Communication

J. Arthur Heise, *Professor and Dean*
Lillian Lodge Kopenhaver, *Professor and Associate Dean*
William Adams, *Associate Professor*
Margo Berman, *Associate Professor*
Humberto Delgado, *Associate Professor*
Mario Diament, *Associate Professor*
Kathleen Donnelly, *Assistant Professor*
Louis K. Falk, *Associate Professor*
Hugh Gladwin, *Director, Institute for Public Opinion Research*
Ann Goraczko, *Coordinator, Institute for Public Opinion Research*
Charles Green, *Director, International Media Center*
Kevin Hall, *Editor-in-Residence*
Laura Kelly, *Instructor*
Carey Martin, *Assistant Professor*
David L. Martinson, *Professor*
Patricia B. Rose, *Associate Professor and Chairperson, Department of Advertising and Public Relations*
Don Sneed, *Professor, Department of Journalism and Broadcasting*
Adriana Stella, *Assistant Director, Student Services*
Carlos Suris, *Director, Student Resource Center*
Saul Sztam, *Director, Student Services*
Lorna Veraldi, *Associate Professor*
John Virtue, *Deputy Director, International Media Center*
Mark Watts, *Assistant Director, Institute for Public Opinion Research*

Bachelor of Science in Communication

Degree Program Hours: 120-124

The School of Journalism and Mass Communication is fully accredited by the Accrediting Council on Education in Journalism and Mass Communications. Approximately 25 percent of all Schools of Journalism and Mass Communication in the United States are fully accredited.

The aim of the undergraduate communication program at the University is to prepare students who

1. are broadly educated, demonstrated by a grasp of the liberal arts and an appreciation of the value of knowledge and learning, including exploration in some depth of a specific field of knowledge outside communication;

2. can think clearly and objectively about the complexities of the modern world, formulate concepts and effectively communicate this information to targeted audiences;

3. are proficient in the basic skills necessary to meet professional requirements at the entry level in one of the tracks offered by the school. This shall include the ability to write English to professional standards and to master the mechanics of grammar, spelling, and punctuation; and

4. understand the social, ethical, economic, philosophical, and political aspects of the communication professions in a global society.

The School offers majors in advertising, broadcast journalism, print journalism, public relations, television production and television management. Approximately 25 percent of a student's course work is within the school. The purpose is to provide professional career entry skills as well as a broader understanding of communication processes and techniques and their impact on society.

Emphasis is placed on a broad range of knowledge. In keeping with the standards required of nationally-accredited mass communication programs for graduation, all students must take a minimum of 90 semester hours outside the field of journalism and mass communication; a minimum of 65 of those hours must be in the liberal arts.

Additionally, students will select an area of concentration outside the field of communication to pursue in depth. Each advisor will provide recommendations for students with particular career goals.

Typing ability is required of all students.

Lower Division Requirements

Due to the school's accreditation, lower division students are encouraged to enroll in liberal arts courses beyond their general or core curriculum requirements. A list of suggested courses can be obtained in the Office of Student Services. In order to be admitted into the upper division program, FIU undergraduates and transfer students must complete 60 credits and have a GPA of 2.0 or higher.

In addition to verifying all requirements for admission, the school evaluates all previous course work to ascertain that the admitted student has met the University's general education or core curriculum requirements as well as those of the School and/or track. Furthermore, we strongly recommend that students complete any deficiencies within the first two semesters upon entering upper division status.

Writing Proficiency

All students in each track are expected to demonstrate proficiency in writing. Students are required to enroll in Writing Strategies for Reaching a Mass Audience (MMC 3104C) and receive a 'C' or higher within the first 12 hours of the program. Admission to MMC 3104C requires the passing of a diagnostic English test. Those who do not pass will be referred to the School's own Writing Lab for tutoring and practice as preparation for retaking the test. MMC 3104C is a prerequisite for ADV 3500, ADV 4101, ADV 4103, ADV 4300, ADV 4930, JOU 3113, MMC 4609, PUR 4100, PUR 4101, or PUR 4934. For journalism majors, minimum exit scores are required on the grammar test for MMC 3104C, JOU 3113, JOU 3117, JOU 4101 and RTV 4323.

Transfer Credit

Transfer students entering the program may receive credit, with school approval, for a maximum of six semester hours of communication courses previously taken at another institution with a grade of 'B' or higher in each course. This does not include MMC 3104C, MMC 4200, and skills courses.

Lower Division Students

Freshmen and sophomores planning to enter the school are encouraged to write or visit the school to discuss requirements, career opportunities, and their programs of study.

Acceptable Performance

Only grades of 'C' or higher in School courses, the student's area of concentration, and other courses as required by the School shall apply for graduation. A 'C-' is unacceptable. In order to take courses, students must have completed all prerequisites for the course with a grade of 'C' or better. Any student found not to have completed the specific requirements as stated in the catalog and the course outline will be given a 'WF' grade if the student does not drop the course prior to the end of the drop period.

Courses Outside the School

A minimum of 90 semester hours must be taken outside the field of journalism and mass communication. Sixty-five (65) of these hours must be in the liberal arts. These requirements must be satisfied in order to graduate.

Graduation Policy

To be eligible for graduation, a student must have a minimum 2.5 GPA in all SJMC courses as well as in the outside courses required by the program. The grade point average will be computed seperately to maintain the 2.5 standard in both categories.

Advertising

School Requirements (9 credits)

MMC 3003	Mass Communication Orientation[1]	0
MMC 3104C	Writing Strategies for Reaching a Mass Audience[1]	3
MMC 3602	Mass Media and Society[1]	3
MMC 4200	Mass Communication Law and Ethics	3

Track Requirements (21 credits)

ADV 3000	Principles of Advertising[1]	3
ADV 3200	Creative Concepts[1]	3
ADV 4930	Advertising Seminar *(Prerequisites: MMC 3104C, ADV 3000, PUR 3000, ADV 3200 or PUR 4100 and Permission of the Instructor).*	3
PUR 3000	Principles of Public Relations	3
MMC 4410	Integrated Communication Campaigns *(Prerequisites: PUR 3000, ADV 4101, ADV 4103 or ADV 3500, ADV 4300)*	3

If concentrating in creative, students will take:

ADV 4101	Advanced Print Concepts *(Prerequisites: ADV 3000, ADV 3200 (with 'B' grade), MMC 3104C)*	3
ADV 4103	Radio/TV Concepts *(Prerequisites: ADV 3000, ADV 3200 (with 'B' grade), MMC 3104C*	3

If concentrating in account work, students will take:

ADV 3500	Advertising Strategy Research	3
	(Prerequisite: MMC 3104C and ADV 3000)	
ADV 4300	Media Planning *(Prerequisites: ADV 3000, MMC 3104C)*	3

Departmental Elective: (3 credits)

Students must select one of the following courses in addition to the above:

JOU 3003	Principles of Journalism
JOU 4208	Magazine Editing and Production
MMC 4936	Special Topics (Advertising)
MMC 4945	Communication Internship
PUR 4101	Publications Editing and Design
RTV 3000	Principles of Television

[1]These are the track core courses which must be completed within the first 18 hours of the program.

Area of Concentration (15 credits)

In consultation with an advisor, students must elect a coherent series of five upper-division courses (15 semester hours) in a non-communication area related to their career emphasis.

Liberal Arts Requirements (12 credits)

Students must select one upper division (3000-4000 level) course from each of the following subject areas: English, anthropology/sociology, psychology, visual arts/political science/statistics/ international relations in order to meet the 12 credit upper division requirement. These credits are in addition to the area of concentration

Internship

Internships are available for advertising majors who have not yet gained experience in the field. Students who have a 3.0 GPA in School course work and meet the curricular requirements outlined in the internship packet may elect an internship in consultation with their advisors. The internship requires a minimum of 300 hours of work for 3 academic credits.

Journalism

Students may choose the Print Journalism Track (for newspaper, magazine, or wire service careers), or the Broadcast Journalism Track (for television and radio careers). The following are the course requirements for each track.

School Requirements (9 credits) (Both Journalism Tracks)

MMC 3003	Mass Communication Orientation[1]	0
MMC 3104C	Writing Strategies for Reaching a Mass Audience[1]	3
MMC 3602	Mass Media and Society[1]	3
MMC 4200	Mass Communication Law and Ethics[1]	3

Print Journalism Track Requirements (25 credits)

JOU 3003	Principles of Journalism[1]	3
JOU 3113L	Newsroom *(Prerequisites: MMC 3104C, JOU 3003)*	3
JOU 3117	Print News Reporting *(Prerequisites: JOU 3113L)*	3
RTV 3301	Broadcast News Reporting *(Prerequisite: JOU 3113L)*	3
JOU 3121	Data Base and Public Records Reporting *(Prerequisite: JOU 3113L)*	3
JOU 3200	Editing and Makeup *(Prerequisites: JOU 3117)*	3
JOU 3300	Feature Writing *(Prerequisite: JOU 3117, RTV 3301)*	3
JOU 3320	Reporting in a Multi-Ethnic Community *(Corequisite: JOU 3113L)*	1
JOU 4101	In-Depth Reporting *(Prerequisite: JOU 3117, RTV 3301)*	3

Broadcast Journalism Track Requirements (25 credtis)

JOU 3003	Principles of Journalism[1]	3
JOU 3113L	Newsroom *(Prerequisites: MMC 3104C, JOU 3003)*	3
JOU 3117	Print News Reporting *(Prerequisite: JOU 3113L)*	3
RTV 3301	Broadcast News Reporting *(Prerequisite: JOU 3113L)*	3
JOU 3121	Data Base and Public Records Reporting *(Corequisite: JOU 3113L)*	3

RTV 4323	Documentary Production *(Prerequisites: JOU 3117, RTV 3300, RTV 4466)*	3
RTV 4466	Electronic News Gathering *(Corequisite or Prequisite: JOU 3117, RTV 3300))*	3
RTV 4324	News and Public Affairs Production *(Prerequisites: JOU 3117, RTV 3300, RTV 4466)*	3
JOU 3320	Reporting in a Multi-Ethnic Community *(Corequisite: JOU 3113L)*	1
JOU 4946	Broadcast Journalism Internship (Corequisite: RTV 4324; Prerequisite: RTV 3301)	0

[1]These are the track core courses which must be completed within the first 18 hours of the program.

Requirements Outside Journalism (27 credits) (Both Journalism Tracks)

Students must earn a minimum of 65 semester hours in liberal arts courses, which are the core of a required 90 hours outside the School of Journalism and Mass Communication.

The following courses outside SJMC are required for all print and broadcast journalism students:

POS 2042	American Government	3
POS 3153	Urban Politics	3
	or a 3000/4000 POS or INR course	3
Sociology 3000/4000 level course		3
ECO 3040	Consumer Economics	3
	or	
ECP 3613	Urban Economics	3
AMH	American History 3000/4000 level	3
Another History Course 3000/4000 level		3
Two AML, ENL, LIT Literature 3000/4000 level courses		6
PHI 2103	Critical Thinking	3

Public Relations

School Requirements (9credits)

MMC 3003	Mass Communication Orientation[1]	0
MMC 3104C	Writing Strategies for Reaching a Mass Audience[1]	3
MMC 3602	Mass Media and Society[1]	3
MMC 4200	Mass Communication Law and Ethics	3

Track Requirements (24 credits)

PUR 3000	Principles of Public Relations[1]	3
PUR 4100	Writing for Public Relations *(Prerequisites: PUR 3000, MMC 3104C)*	3
PUR 4101	Publications Editing and Design *(Prerequisite: PUR 4100)*	3
PUR 4106	Advanced PR Writing *(Prerequisite: PUR 4100)*	3
MMC 4410	Integrated Communication Campaigns *(Prerequisites: PUR 4101, PUR 4106, ADV 3000, MMC 4609)*	3
MMC 4609	Public Opinion and the Mass Media *(Prerequisite: MMC 3104C)*	3
ADV 3000	Principles of Advertising	3

Students must select one of the following elective courses:

MMC 4936	Special Topics (PR)	3
MMC 4945	Communication Internship	3
PUR 4934	Public Relations Seminar *(Prerequisites: MMC 3104C, PUR 3000, ADV, 3200 or PUR 4100 and Permission of the Instructor)*	3

[1]These are the track core courses which must be completed within the first 18 hours of the program.

Area of Concentration (15 credits)

In consultation with an advisor, the student must take 15 upper division semester hours in one area of emphasis outside the School. These courses should relate to the student's career expectations. Several traditional areas of specialization are as follows:

Governmental public communication (public administration, international relations, criminal justice, or political science)

Corporate public relations (marketing or management)

Non-profit public relations (social sciences or marketing)

Public relations for travel and tourism (hospitality management)

These groupings do not preclude other specialized areas of interest, including modern languages and the certificate programs available in the College of Arts and Sciences.

Liberal Arts Requirements (12 credits)

Students must select one course from each of the following subject areas: American/English literature/LIN 3670, economics, psychology, political science/international relations/statistics in order to meet the 12 credit upper division requirement. These credits are in addition to the area of concentration.

Internship

The internship is important for public relations majors who have not yet gained experience in the field. Students who have a 3.0 GPA in School course work and meet the curricular requirements outlined in the internship packet may select an internship in consultation with their advisors. The internship requires a minimum of 300 hours of work for three academic credits.

Television

School Requirements (9 credits) (Both Television Tracks)

Students in the Television Track may choose Production or Management. In addition to the individual track requirements, students must take the following school requirements:

MMC 3003	Mass Communication Orientation[1]	0
MMC 3104C	Writing Strategies for Reaching a Mass Audience[1]	3
MMC 3602	Mass Media and Society[1]	3
MMC 4200	Mass Communication Law and Ethics[1]	3

Production Track Requirements (27 credits)

MMC 4262	New Technologies	3
RTV 4101	Advanced Writing for TV *(Prerequisite: MMC 3104C)*	3
RTV 3000	Principles of Television[1]	3
RTV 3200	Video Studio Production	3
RTV 3262	Video Field Production	3
RTV 3263	Video Post Production *(Prerequisites: RTV 3262)*	3
RTV 3207	Video Directing *(Prerequisite: RTV 3200)*	3
RTV 4206	Advanced Video Production Workshop *(Prerequisite: RTV 4800)*	3

RTV 4800	Station Operation *(Prerequisites: RTV 3207 and RTV 3263)*	3

Management Track Requirements (21 credits)

RTV 3000	Principles of Television[1]	
RTV 3500	Broadcasting Programming Theory *(Prerequisite: RTV 3000)*	3
RTV 4101	Advanced Writing for TV (Prerequisite: MMC 3104C)	3
MMC 3250	Media Management	3
RTV 3803	Video Studio Management	3
MMC 4262	New Technologies *(Prerequisites: RTV 3000)*	3

Management Elective
Select one of the following:

MMC 4945	Communication Internship *(Co or prerequisite: RTV 3500 and MMC 3250)*	3

or any 3 credit course in the School of Journalism and Mass Communication
[1]These are the track core courses which must be completed within the first 18 hours of the program.

Area of Concentration (12 credits) (Both Television Tracks)

Students must take at least 12 upper division semester hours in a field outside the school. This field of study will be decided upon with the advisor, with appropriate consideration given to the student's specialized needs.

Liberal Arts Requirements (12 credits) (Both Television Tracks)
Students must select a total of 12 semester hours in the following subject areas: art (photography), art history, computer science, English, history, political science, philosophy, sociology or anthropology in order to meet the upper division liberal arts requirements. These credits are in addition to the area of concentration.

Internship or Professional Expansion of Knowledge (PEK)

The internship is important for television majors who have not yet gained experience in the field. Therefore, students who have a 3.0 GPA in school course work and meet the curricular requirements outlined in the internship packet or PEK packets may select the internship or PEK in consultation with their advisor. Either requires a minimum of 300 hours of work for 3 academic credits.

Minor in Advertising (18 credits)

Students are required to take the following four courses:

MMC 3104C	Writing Strategies for Reaching a Mass Audience	3
ADV 3000	Principles of Advertising	3
ADV 3200	Creative Concepts	3
MMC 4410	Integrated Communications Campaign	3

They must also choose either of the following two groups of courses for a total of 18 semester hours.

Group I:

ADV 4101	Advanced Print Concepts	3
ADV 4103	Radio/TV Concepts	3

Group II:

ADV 3500	Advanced Strategy Research	3
ADV 4300	Media Planning	3

Minor in Journalism (16 credits)

MMC 3104C	Writing Strategies for Reaching a Mass Audience	3
JOU 3113L	Newsroom	3
JOU 3003	Principles of Journalism	3
JOU 3320	Reporting in a Multi-Ethnic Community	1
JOU 3117	Print News Reporting	3
RTV 3301	Broadcast News Reporting	3

Minor in Public Relations (18 credits)

Required Courses

MMC 3104C	Writing Strategies for Reaching a Mass Audience	3
PUR 3000	Principles of Public Relations	3
PUR 4100	Writing for Public Relations	3
PUR 4106	Advanced PR Writing	3
JOU 4208	Magazine Editing and Production	3
	or	
PUR 4101	Publications Editing and Design	3
MMC 4410	Integrated Communication Campaigns	3

Minor in Mass Communication (15 credits)

MMC 3602	Mass Media and Society	3
MMC 4200	Mass Communication Law and Ethics	3

Students may select two courses from those listed below:

PUR 3000	Principles of Public Relations	3
	or	
ADV 3000	Principles of Advertising	3
	or	
RTV 3000	Principles of Television	3
	or	
JOU 3003	Principles of Journalism	3

One three-credit elective course at the 3000 level or higher in the school. (May include one of the two remaining courses above.)

Minor in Television

Required Courses: (15)

MMC 3602	Mass Media and Society	3
RTV 3000	Principles of Television	3
RTV 3200	Studio Production	3
RTV 3500	Programming Theory *(Prerequisite: RTV 3000)*	3
	or	
RTV 4101	Advanced Writing for TV	3
MMC 3250	Media Management	3

Certificate Programs

Media Management (15 credits)
This 15 credit certificate will provide basic information about the Television Management field and provide the tools necessary to prepare students for entry level management positions.

Required Courses

RTV 3000	Principles of Television	3
MMC 3250	Media Management	3
RTV 3500	Programming Theory	3
MMC 4262	New Technologies	3
MMC 4200	Mass Communication Law and Ethics	3

Spanish Language Journalism (15 credits)

The objective of the professional certificate in Spanish Language Journalism is to develop skills and techniques that will allow working journalists to be more responsive to the demands of their profession as well as the opportunity to become more familiar with Spanish-language journalism in general. The focus of the program will be on reading, writing, and thinking. All courses will be taught in Spanish. Some courses may be offered off campus.

Interested students should contact the department for additional information and course requirements.

Student Media Advising (15 credits)

This professional certificate program is designed primarily for journalism teachers and for student media advisers

on all levels and for those aspiring to the profession. This program will satisfy the requirements of the certification, re-certification or incentive credits for current public school teachers in the field.

The Certificate in Student Media Advising requires 15 credits to be taken as follows:

Required Courses:

JOU 5806	Student Publications Supervision
MMC 5207	Ethical and Legal Foundations of the Student Press
VIC 5205	Trends in Graphics and Design

Elective Courses

Students must take two of the following:

RTV 5936	Seminar in New Communication Technologies
MMC 6402	Theories of Mass Communication
MMC 6635	Contemporary Issues in Mass Communication
PUR 4101	Publications Editing and Design
JOU 4208	Magazine Editing and Production

or

other courses upon approval of the faculty advisor.

Television Production (15 credits)

This 15 credit certificate program will provide training in basic television production to interested students, professionals or those who simply want to enter the production field.

Required Courses

RTV 3000	Principles of Television	3
RTV 3262	Video Field Production	3
RTV 3200	Studio Production	3
RTV 3207	Video Directing *(Prerequisite: RTV 3200)*	3
RTV 3263	Video Post Production *(Prerequisite: RTV 3262)*	3

Course Descriptions

Definition of Prefixes

ADV-Advertising; JOU-Journalism; MMC- Mass Media Communication; PGY-Photography; PUR-Public Relations; RTV-Radio-Television; VIC-Visual Communication.

ADV 3000 Principles of Advertising (3). Comprehensive survey of basic principles and practices of advertising emphasizing creative/media strategy decision processes and historical, social, economic, and social influences.

ADV 3200 Creative Concepts (3). Introduction to copywriting, graphic design and print production. Emphasis on terminology as well as message construction relative to strategy, style, and format.

ADV 3500 Advertising Strategy Research (3). Nature and application of research utilized in advertising. Emphasis on gathering and analyzing primary and secondary data to determine situation analyses and advertising strategies. Prerequisites: MMC 3104C and ADV 3000.

ADV 4101 Advanced Print Concepts (3). Advanced copywriting and graphic design. Lab exercises focusing on concept, layout, type specification and mechanical preparation of print advertising, including outdoor and direct response. Prerequisite: ADV 3000, ADV 3200,with a grade of "B" or better, and MMC 3104C. (Supplies fee assessed)

ADV 4103 Radio/TV Concepts (3). Theory and practice of producing advertisements for radio and TV. Includes production of a radio and/or TV commercial. Prerequisites: MMC 3104C, ADV 3000, ADV 3200 with a grade of "B" or better.

ADV 4300 Media Planning (3). Planning, execution, and control of advertising media programs. Emphasis on characteristics of the media, buying and selling processes, and methods and techniques used in campaign planning. Prerequisite: ADV 3000, MMC 3104C.

ADV 4930 Advertising Seminar (3). A variable topics seminar dealing with one selected area of advertising, such as international advertising, media sales, advertising in the service sector. Prerequisites: MMC 3104C, ADV 3000, PUR 3000 & PUR 4100 or ADV 3200 and Permission of the Instructor.

JOU 3003 Principles of Journalism (3). Study and discussion of the historical, ethical and legal principles of journalism in America.

JOU 3113L Newsroom (3). Instruction and practice in the fundamentals of news writing, reporting and interviewing. Prerequisites: MMC 3104C and JOU 3003. (Supplies fee assessed)

JOU 3117 Print News Reporting (3). Advanced instruction and practice in news writing, reporting and interviewing for print media. Prerequisite: JOU 3113L. (Supplies fee assessed)

JOU 3121 Data Base and Public Records (1). Understanding of database and printed records access and use in reporting. Corequisite: JOU 3113L.

JOU 3200 Editing and Makeup (3). Editing news copy for accuracy, brevity, and clarity, including practice with AP style, copy and proofreading marks. Learning the role and function of the news editor. Design and layout of newspaper pages, including working with art, photographs and headlines, and editing and fitting news copy. Prerequisite: JOU 3117.

JOU 3300 Feature Writing (3). Writing the feature story: human interest, trends, personality profiles, sidebars, backgrounders, color. Prerequisite: JOU 3113L, JOU 3117, RTV 3301.

JOU 3312 Specialty Journalism (1). Seminars in such topics as investigative, political, business, sports, or minority reporting, and editorials and commentary. Must be taken three times. Prerequisite: JOU 3003.

JOU 3320 Reporting in a Multi-Ethnic Community (1). Learning the political, social and economic backgrounds of ethnic communities in an urban area to improve the reporting of news from those populations and neighborhoods. Corequisite: JOU 3113L.

JOU 4004 Perspectives in Mass Media (3). Examination of contemporary issues in journalism, including legal, moral, and ethical questions and the impact of news on society. Must be taken in the senior year.

JOU 4101 In-Depth Reporting (3). Advanced instruction and practice in researching, reporting and writing a variety of complex news stories. Prerequisite: JOU 3113L, JOU 3117, RTV 3301. (Supplies fee assessed)

JOU 4208 Magazine Editing and Production (3). Develops skill in writing, editing and design, and a knowledge of planning, typography and graphics. Attention is given to developing formats, selecting copy, photos, graphics, and type.

JOU 4946 Broadcast Journalism Internship (0). On-the-job learning in news radio or TV newsrooms or wire service and magazines. Prerequisite:

RTV 3301. Corequisite: RTV 4323 or RTV 4324.

JOU 5806 Student Media Advising (3). Designed to assist teachers and advisers of journalism at the high school and junior college level, this course emphasizes the technical aspects of producing student newspapers, yearbooks, and magazines, as well as the legal and ethical considerations facing today's adviser. In addition, attention is given to matters pertaining to curriculum and methodology for effective journalistic instruction.

MMC 3003 Mass Communication Orientation (0). A course designed to provide the students with a comprehensive overview of academic policies, procedures and requirements for matriculation and graduation from the School of Journalism and Mass Communication.

MMC 3104C Writing Strategies for Reaching a Mass Audience (3). An advanced writing course that applies creative thinking techniques, especially in the generation of ideas for mass media presentation, as well as the careful and compelling use of language. Prerequisite: Grammar test.

MMC 3250 Media Management (3). Reviews the organization of radio, TV, magazine, and newspaper enterprises.

MMC 3602 Mass Media and Society (3). Investigates the role of mass media and their impact on people's lives. Using all forms of media, examines the interrelationship of major communication professions and society.

MMC 4200 Mass Communication Law and Ethics (3). An in-depth examination of legal and ethical issues confronting professional communicators. Focus on the responsibilities and rights of communicators and the implications for a society entering the 21st century.

MMC 4253 Advanced Media Management (3). A senior level course dealing with case studies of media organizations. Prerequisite: MMC 3250.

MMC 4262 New Technologies of Communication (3). The principal emphasis is upon new technologies in the industry. Prerequisite: RTV 3000.

MMC 4302 Comparative Systems of Mass Communication (3). An examination of various national and international mass communication systems and the elements which determine the type of systems currently operating throughout the world. Prerequisite: RTV 3000.

MMC 4410 Integrated Communications Campaigns (3). Advanced course emphasizing all aspects in developing fully integrated advertising. Prerequisites: ADV 3000, ADV 3500, ADV 4100, ADV 4103, ADV 4300, MMC 4609 PUR 3000, PUR 4101, or PUR 4106.

MMC 4500 Media History (3). Development of American media from beginnings in Europe to present day; freedom of the press and its relationships to economic, political, and social trends in society.

MMC 4609 Public Opinion and the Mass Media (3). Study of the communication process, persuasion, and attitude change. Explores the methods of measuring, analyzing, changing, and/or maintaining the public opinion for socially acceptable causes. Prerequisite: MMC 3104C.

MMC 4613 Effects of the Mass Media (3). Reviews the effects of the media, with special attention to children, minorities, terrorism, and Third World countries.

MMC 4661 Race, Multiculturalism and the Mass Media (3). A critical review of the role of the mass media as it relates to ethnic, religious, and social minorities in a pluralistic society.

MMC 4905 Independent Study (1-3). Specialized intensive study in an area of special interest to the student. Consent of instructor is required. (Limit of three credits).

MMC 4936 Special Topics (VAR). Intensive study for groups of students of a particular topic or limited number of topics, not otherwise offered in the curriculum. Consent of instructor or dean is required.

MMC 4940 Media Practicum (3). Structured field-work experience in media environment.

MMC 4945 Communication Internship (3). On-the-job learning in activity at selected and approved organizations. Will include newspapers, magazines, radio and TV stations, agencies, and non-profit organizations. Prerequisite: Consent of advisor.

MMC 5207 Ethical and Legal Foundations of the Student Press (3). Examines ethical and legal foundations underlying the operation of the student press on American campuses, stressing both rights and responsibilities and how to organize publications to protect both.

MMC 5445 Applied Research Methods in the Mass Media (3). An advanced course in the acquisition and use of secondary data, including media data, as well as the design, execution and utilization of research studies. Students will conduct an original proprietary study. Prerequisite: STA 1013 or equivalent.

MMC 5932 Special Topics Seminar (3). A variable topic seminar dealing with issues of interest to the community. Examples are rights of high school journalists, cable TV, the use of mini-computers in creative communication.

PUR 3000 Principles of Public Relations (3). An introduction to the theory, history, practice, and future of public relations. A comprehensive study of the field.

PUR 4100 Writing for Public Relations (3). Introduction to preparation of news releases, public service announcements, backgrounders and newsletter copy. Exposure to media relations and non-profit and corporate advertising. Prerequisites: PUR 3000 and MMC 3104C. (Supplies fee assessed)

PUR 4101 Publications Editing and Design (3). Design, editing, and production of materials in the area of trade, corporate, organizational, and technical press, with special attention given to typography, style and production of tabloid and magazine format publications. Prerequisite: PUR 3000, PUR 4100, or consent of instructor. (Supplies fee assessed)

PUR 4106 Advanced PR Writing (3). Further development of writing skills including preparation of feature stories, news media kits and materials for special events. Exposure to target audience selection for news media placement. Prerequisite: PUR 4100, MMC 3101C, PUR 3000. (Supplies fee assessed)

PUR 4934 Public Relations Seminar (3). Open to public relations-emphasis students only. A course designed to allow the advanced public relations student to pursue a specially selected, specific area of public relations (i.e., political, medical, financial, government, corporate, educational, etc.) through in-depth study under a tutorial style of instruction and guidance. Prerequisites: MMC 3104C, ADV

3000, PUR 3000 & PUR 4100 or ADV 3200.

PUR 5406 Multi-Cultural Communications (3). Explores the multicultural dimensions of communications with diverse audiences both internationally and within the United States. Prerequisite: Permission of the instructor.

PUR 5602 Integrated Communications Proseminar (0). Lectures/discussion by distinguished educators/industry professionals and graduate faculty on topics designed to introduce participants to the various components and applications of Intergrated Communications: Advertising & Public Relations (ICAP) graduate study.

PUR 5607 Advertising and Public Relations Management (3). Operations and objectives of integrated advertising and public relations activities and programs utilizing case studies on budgeting, ethics, media planning/relations, promotions and direct marketing. Prerequisite: PUR 5806.

PUR 5806 Integrated Advertising and Public Relations Planning and Evaluation (3). Advanced study in developing, planning and evaluating strategic integrated communications programs and campaigns. Prerequisite: Permission of the instructor.

RTV 3000 Principles of Television (3). Review of broadcasting industries, organization, history, and practices.

RTV 3200 Studio Production (3). Use of television studio equipment and techniques in production of programs, newcasts, documentaries, commercials, training and video productions. Introduction to basic video directing.

RTV 3207 Video Directing (3). Studio directing/technical directing and related techniques used in television entertainment shows, commercials, newscasts, documentaries, training and corporate video productions. Students are expected to solve media-related problems during actual productions. Prerequisite: RTV 3200.

RTV 3262 Video Field Production (3). Use of ENG/EFP equipment and techniques in production of programs, news, documentaries, music videos, commercials, training and video productions on location. Emphasis on single camera techniques and editing. (Supplies fee assessed)

RTV 3263 Video Post Production (3). Advanced post production techniques using A & B rolls, complex audio mixes and their preparation and execution. Prerequisite: RTV 3262 and RTV 3207. (Supplies fee assessed)

RTV 3301 Broadcast News Reporting (3). Advanced instruction and practice in news writing, reporting and interviewing for broadcast media. Prerequisite: JOU 3113. (Supplies fee assessed)

RTV 3500 Programming Theory (3). Introductory course in programming, ratings, and audience analysis. Prerequisite: RTV 3000.

RTV 3803 Studio Management (3). Students are introduced to basic studio language and procedures and will do research about duties of the producer, budgets and related topics.

RTV 4101 Advanced Writing for TV (3). Includes writing for news reporting as well as anchoring. Documentaries, commercials and public service spots. Public affairs programs. Intros, outs and bridges for a variety of programs. Prerequisite: MMC 3104C.

RTV 4206 Advanced Video Production Technique Workshop (3). Advanced course in field video production technique. Emphasis is to develop greater location video skills in narrative construction, including more complex narrative structures, more complex video and audio editing, field camera and sound-recording techniques. Hands-on course. Prerequisite: RTV 3263. (Supplies fee assessed)

RTV 4323 Documentary Production (3). Advanced laboratory and field work to produce, report, write and edit documentaries for television. Prerequisite: JOU 3117, RTV 3301. (Supplies fee assessed)

RTV 4324 News and Public Affairs Production (3). Reporting, writing, producing and editing hard and feature news stories and mini-documentaries for television. Prerequisite: JOU 3114, JOU 3117, RTV 3301. (Supplies fee assessed)

RTV 4466 Electronic News Gathering (3). The course will introduce you to the real world of broadcast journalism. Current styles and techniques of reporting, photo-journalism, and TV news videotape editing will be studied. Prerequisite or corequisite: JOU 3117, RTV 3301. (Supplies fee assessed)

RTV 4800 Station Operation (3). As the last course in the Broadcasting sequence, students learn the operation at a television station. Prerequisites: RTV 3207, RTV 4206.

RTV 5806 Telecommunication Management Structures (3). Intensive study of telecommunication management problems, theory of same, solutions of same through practical application and examination of case studies. Prerequisite: Graduate standing.

RTV 5935 Seminar in International Comparative Broadcasting Systems (3). Introduction to international telecommunication systems with special emphasis on broadcasting. Comparison with other countries. Prerequisite: Graduate standing or permission of the instructor.

RTV 5936 Seminar in New Mass Communication Technologies (3). Discussion of new communication technologies and their influence on the society. Prerequisite: Graduate standing or permission of the instructor.

School of Journalism and Mass Communication

Dean **J. Arthur Heise**
Associate Dean **Lillian Lodge Kopenhaver**
Chairperson, Advertising and Public Relations **Patricia Rose**
Chairperson, Journalism and Broadcasting **TBA**

Faculty

Adams, William, M.A. *(University of Wisconsin), Associate Professor, Journalism and Mass Communication*

Berman, Margo, M.M. *(University of Miami), Associate Professor, Journalism and Mass Communication*

Delgado, Humberto, M.A. *(Goddard College), Associate Professor, Journalism and Mass Communication*

Diament, Mario, M.A. *(Antioch College), Associate Professor, Journalism and Mass Communication*

Donnelly, Kathleen, Ph.D. *(Dublin City University), Assistant Professor, Journalism and Mass Communication.*

Falk, Louis K., Ph.D. *(University of Southern Mississippi), Associate Professor, Journalism and Mass Communication*

Gladwin, Hugh, Ph.D. *(Stanford University), Director, Institute for Public Opinion Research*

Goraczko, Ann, M.S. *(Florida International University), Coordinator, Institute for Public Opinion Research*

Green, Charles, B.A. *(Christian International University), Director, International Media Center*

Hall, Kevin, B.A. *(Fordham University), Editor-in-Residence, Journalism and Mass Communication*

Heise, J. Arthur, Ph.D. *(Syracuse University), Professor and Dean, Journalism and Mass Communication*

Kelly, Laura, M.A., *(American University), Instructor, Journalism and Mass Communication*

Kopenhaver, Lillian Lodge, Ed.D. *(Nova Southeastern University), Professor and Associate Dean, Journalism and Mass Communication*

Martin, Carey, Ph.D. *(Florida State University), Assistant Professor, Journalism and Mass Communication.*

Martinson, David L., Ph.D. *(University of Minnesota), Professor, Journalism and Mass Communication*

Rose, Patricia, M.B.A. *(University of Miami), Associate Professor, and Chairperson, Department. of Advertising and Public Relations, Journalism and Mass Communication*

Sneed, Don, Ph.D. *(Southern Illinois University), Professor, Department of Journalism and Broadcasting, Journalism and Mass Communication*

Suris, Carlos, M.L.S. *(University of South Florida), Director, Student Resource Center, Journalism and Mass Communication*

Veraldi, Lorna, J.D. *(New York School of Law), Associate Professor, Journalism and Mass Communication*

Virtue, John, B.A. *(Carleton University), Deputy Director, International Media Center*

Watts, Mark, Ph.D. *(University of Minnesota), Associate Director, Institute for Public Opinion Research*

College of Urban and Public Affairs

College of Urban and Public Affairs

The College of Urban and Public Affairs was established by the Florida Board of Regents in 1994. Its mission is to serve the urban public in South Florida, the Latin American and Caribbean area, and other urban settings by enhancing the ability of individuals to lead, manage and deliver services in public, private, nonprofit and health institutions. In support of the University's mission as a comprehensive, multicampus, urban institution, the College offers degree programs of professional study that focus on critical management and policy issues in urban environments.

The College is composed of two schools: the School of Policy and Management and the School of Social Work. Through the School of Policy and Management, the College awards the Bachelors and Masters degrees in criminal justice, health services administration and public administration, and the Ph.D. in public administration. The School of Social Work offers programs leading to the Bachelor's and Master's degree in social work, and the Ph.D. in social welfare.

In addition, the College of Urban and Public Affairs is home to five centers and institutes: The Center for the Administration of Justice; Institute of Government; Institute for Children and Families at Risk; HRS/Children, Youth and Families Professional Development Centre; and the Institute for Public Management and Community Service. Each offers unique forms of research support to students. Some of the institutes and centers also offer credit or non-credit courses for professionals in the local, national and international community. Additional information on these centers and institutes may be found in this catalog (General Information - Centers and Institutes).

Students interested in the academic programs offered by the College of Urban and Public Affairs are urged to contact an advisor prior to enrollment for guidance on curriculum and career planning. Please call the School of Policy and Management at (305) 919-5890 or the School of Social Work at (305) 919-5880. Further information may be obtained from the Dean's Office of the College of Urban and Public Affairs at North Campus, Academic I, Room 200 or by phone, (305) 919-5840.

Baccalaureate Admission Requirements

Applicants must be eligible for admission to the University before admission to the College and Schools. FIU freshman and sophomore students may be coded with an intended major in the College upon earning 24 semester hours. They may be fully admitted to the College if they have earned 60 semester hours, have a cumulative grade point average (GPA) of 2.0 or a minimum cumulative (GPA) of 2.5 for the B.S.W. program, have passed the CLAST, and have met the specific degree program admission requirements. Full admission to the College is accomplished by filing the form Request for Acceptance into Upper Division College/School.

Transfer students may be admitted into a program in the College if they have received an Associate of Arts degree from a Florida community college, or if they otherwise meet the minimum requirements. These requirements are 60 semester hours earned at a community college or a four-year institution, and a minimum cumulative grade point average (GPA) of 2.0 or a minimum cumulative 2.5 for the B.S.W. program. In addition, students must have passed the CLAST and must meet specific degree program requirements.

All students are encouraged to seek advising as early as possible in the school/program of their choice, even if they have not yet been fully admitted into that major.

Transfer Credits

The University will generally accept up to 60 lower-division semester hours of transfer credit from other post-secondary academic institutions which are fully accredited by a regional accrediting association. A student who wishes to transfer in semester hours at the upper-division level must request such a transfer during their first semester of enrollment from the program director. The decision to grant transfer credit beyond 60 lower-division semester hours is fully at the discretion of the program director and must be in accordance with the program and university requirements outlined in this catalog. The maximum number of semester hours that a student may transfer will not exceed 90 hours. Students should insure that they fully understand the impact of transfer credits, if granted, on their planned program of study.

Academic Advisement

A student who has been accepted to a degree program in the College will be assigned an academic advisor by the School in which the academic major is desired. Continued contact (at least once a semester) with the academic advisor to review progress and select courses for each succeeding semester is required until an approved program of study is completed.

Degree Requirements

Students who are anticipating graduation must schedule an appointment with their academic advisor for a graduation check at least two semesters before their anticipated graduation date. At this advising session, students should ensure that all documentation has been received and posted to their transcripts and/or student files with respect to transfer credits, general education requirements, foreign language requirements and CLAST exam results.

Candidates to the baccalaureate degree must satisfy both university requirements and individual program requirements as described in the appropriate sections of this catalog. Specifically, the following conditions must be met:

1. Recommendation of the faculty of the School awarding the degree, signifying the completion of all program requirements as described in this catalog.
2. Certification by the Dean of the College of Urban and Public Affairs that all requirements for the degree have been met.
3. A minimum of 120 semester hours of acceptable course work.
4. A minimum of 60 semester hours of upper-division (3000 or 4000-level) course work.
5. Completion of the last 30 semester hours at Florida International University. (Exceptions, normally not to exceed six credit hours, may be made in advance by the Dean. Students must request such an exception in writing through their program director and obtain approval prior to commencing course work at another institution.)
6. Completion of the General Education Requirements or, in the case

of students admitted with less than 37 transfer credit hours, the Lower Division Core Curriculum as described in this catalog in (General Information- Core Curriculum Requirements, General Education Requirements.)

7. A cumulative GPA of 2.0 or higher for courses taken at Florida International University.

8. The grade requirements for major, core courses and course sequences established by the appropriate School.

9. Satisfactory completion of the College Level Academic Skills Test (CLAST) requirement as described in this catalog under (General Information- Office of Undergraduate Studies.)

10. Completion of the foreign language requirement described in this catalog under (General Information- Academic Degree Requirements.)

Field Experiences

As an integral part of the program curriculum, the student may be required to participate in supervised learning experiences in community service agencies. The clinical and field work experience is one of orientation, observation, and practice in the particular program specialties of the College and it is structured concurrently with relevant classroom experiences. In programs where the clinical or field experience is not required, students are urged to explore the possibility of engaging in such an experience with their program coordinator. Numerous community organizations provide opportunities for student internships and field practices.

University Outreach and Special Programs

The College of Urban and Public Affairs, through its Centers and Institutes and in cooperation with the Division of University Outreach, offers many credit, non-credit, and workshop courses in off-campus locations in Dade, Broward, and Monroe Counties. Courses and locations vary each semester. Further information can be obtained directly from the Division of University Outreach or the relevant centers and institutes of the College.

Changes to Curriculum Requirements

The programs, policies, requirements and regulations listed in this catalog are continually subject to review in order to serve the needs of the University's various publics and to respond to the mandates of the Florida Board of Regents and the Florida Legislature. This is especially true for several programs in the College of Urban and Public Affairs that are subject to national accreditation requirements. According to university policy, changes in the curriculum may be made without advance notice.

Generally, the College of Urban and Public Affairs makes every effort to minimize the impact of curriculum changes on currently-enrolled students by stipulating that students complete the requirements of their degree program in effect at the time of admission to the program. In the event that this is not possible due to accreditation standards or the deletion of courses, students may be required to complete alternative degree requirements in order to graduate.

School of Policy and Management

Howard Frank, *Acting Director*
Jose Marques, *Associate Director, Undergraduate Programs*

The School of Policy and Management includes Criminal Justice, Health Services Administration, and Public Administration

Admissions

Once students complete 60 semester hours, they may apply for admission into the program. FIU undergraduates who have met the Core or the General Education lower division requirements, who have passed the CLAST, and who have a grade point average (GPA) of above a 2.0 will qualify for admission to the program. (Meeting these requirements will not guarantee admission to the program).

Dean's List

Any fully admitted undergraduate student who earns a semester average of 3.5 or higher on nine or more semester credit hours of course-work for which grade points are earned, is placed on the semester Dean's list. This achievement is noted on the student's semester report of grades and permanent academic record (transcript).

Application for Graduation

Students must submit an Application for Graduation form to the Office of the Registrar by the deadline date. (refer to the academic calendar). Students turning in the Application for Graduation after the deadline will graduate the following semester. Students who have not met the requirements for graduation must plan to complete them and must re-apply for graduation. It is highly recommended that students see an advisor before they apply for graduation.

Academic Warning, Probation and Dismissal

Warning

An undergraduate student whose cumulative GPA falls below a 2.0 will be placed on warning, indicating academic difficulty. The warning will appear on the student's end-of-term grade report but not on the official transcript. A hold will be placed on registration, and the student must see an advisor before they will be allowed to register for classes.

Probation

An undergraduate student on warning whose cumulative GPA falls below 2.0 will be placed on probation, indicating serious academic difficulty. SPM may indicate the conditions which must be met in order to continue to enroll. A hold will be placed on registration, and the student must see an advisor before they will be allowed to register for classes.

Dismissal

An undergraduate student on Probation whose cumulative and semester GPAs fall below a 2.0 will be automatically dismissed from his or her program and the University. An undergraduate student will not be dismissed prior to attempting a minimum of 20 semester hours of course work. The student has ten working days to appeal the dismissal decision. This appeal must be made in writing to the Dean of the School. The dismissal from the university is for a minimum of one year. After one year, the student may apply for re-admission (see Re-admission in General Information) to the University in the same or a different program, or register as a non-degree seeking student.

Dismissed students reapplying for admission or registering as non-degree seeking students are automatically placed on academic probation.

Advising

The School of Policy and Management offers advising through the Student Coordinator's Office and Lead Advisor Program. Students are encouraged to make appointments with an advisor when they begin their programs, before they apply for graduation, and at any point in between. It is important that degree-seeking undergraduate students bring a copy of their SASS Report (which can be obtained at the Office of the Registrar) to the appointment or any time they plan to see an advisor.

The School of Policy and Management also offers Social Orientations twice a year, specifically designed to answer questions about our programs. New students are particularly encouraged to attend, but the invitation is extended to all students.

Undergraduate students may also find information through the FACT Sheets and the SPM Newsletter. The newsletter is printed each semester. Each are available at the Dean's Office and the Administrative Office on North Campus, and at the Branch Office at University Park Campus.

Criminal Justice

Ellen G. Cohn, *Associate Professor and Coordinator*
Stewart D'Alessio, *Assistant Professor*
Suman Kakar, *Associate Professor*
Jose A. Marques, *Associate Professor*
Luis Salas, *Professor*
Regina Shearn, *Associate Professor*
Robert Snow, *Associate Professor*
Lisa Stolzenberg, *Assistant Professor*
W. Clinton Terry, *Associate Professor*
James Vardalis, *Assistant Professor*

Criminal Justice is an area of study dealing with the formal mechanisms of social control by which society exercises constraint over its members. The study of criminal justice is interdisciplinary. It involves law, the social and behavioral sciences, crime, the reaction of society to the crime problem, and the means utilized in treating it.

A variety of career opportunities are available in criminal justice at all levels of government and the private sector. Due to its interdisciplinary approach, the study of criminal justice fills the needs of students seeking careers in teaching, research, law, and within the various agencies of the criminal justice system.

Bachelor of Science in Criminal Justice

Degree Program Hours: 120

Lower Division Preparation

Students majoring in criminal justice should consult with their academic advisor to ensure that the courses they selected meet program and degree requirements, and are consistent with their long range academic and career objectives.

Recommended Courses

Students intending to enroll in the criminal justice program are urged to complete an Associate in Arts degree at the lower division. Entering students are not required to have been enrolled in a pre-criminal justice program. Students having an Associate in Science degree or 60 semester hours will also be accepted, but must complete general education requirements before the bachelor's degree can be awarded.

Admissions

Once students complete 60 semester hours, they may apply for admission into the program. FIU undergraduates who have met the Core or the General Education lower division requirements,

who have passed the CLAST, and who have a grade point average (GPA) of above a 2.0 will qualify for admission to the program. (Meeting these requirements will not guarantee admission to the program).

Upper Division Program

Core Courses

Seven courses are required of every student in criminal justice. A core course requirement can only be waived by the Coordinator with the recommendation of the student's faculty advisor.

CCJ 3011	Nature and Causes of Crime	3
CCJ 3101	Law Enforcement Systems	3
CCJ 3290	Judicial Policy Making	3
CCJ 3306	Correctional Philosophy, Theory and Practice	3
CCJ 4252	Criminal Justice and the Constitution	3
URS 4112	Computer Applications for Urban Services	3
URS 4152	Research Methods for Urban and Regional Studies	3

Criminal justice majors are advised to complete all core requirements in the early stages of their study in order to ensure completion for graduation.

Area of Interest

Eighteen semester hours at the 3000-level or above in criminal justice are required for criminal justice majors. Only nine semester hours of CCJ 4940 will count toward this requirement. Course work from disciplines outside of criminal justice will not be accepted to fulfill requirements in the criminal justice area of interest category.

General Electives

Twenty-one semester hours are required. (No more than nine hours can be criminal justice courses). Relevancy of elective courses will be determined in consultation with the student's advisor or the Coordinator. The faculty retains the prerogative to accept or reject electives taken without approval. *Remarks*: Independent study and directed reading courses may not be taken outside of the Criminal Justice Program except with written permission of the Criminal Justice Coordinator.

Internships

Although it is not required, it is highly recommended that students in the Criminal Justice Program who do not have relevant work experience apply for field placement as an Intern. Interested students must speak to the Program Director well in advance to ensure the availability of locations. Students should have the majority of their core courses completed, and must satisfy any other requirements as directed by the Program Director or the sponsoring site. Only nine semester hours may be used in .the Area of Interest.

Students are required to maintain a minimum GPA of 2.0 in the criminal justice area of interest and a minimum grade of 'C' in each of the criminal justice core courses. Note: A 'C-' is not acceptable.

Transfer Credit

A student transferring from a four year college may transfer up to 90 semester hours into the criminal justice program; however, the student must still have at least 60 semester hours at the 3000-level or above. All work transferred to FIU is subject to review and approval by the Criminal Justice Coordinator. Criminal justice courses completed with a grade of 'D' will not be transferred.

Double Majors and Degrees

Students must complete the core courses (21 hours) plus 18 additional hours in criminal justice in order to:

1. satisfy criminal justice requirements for a double major,
2. obtain a second degree with a major in criminal justice,
3. obtain two baccalaureate degrees simultaneously (provided requirements for two majors have been completed as certified by the appropriate academic units, and a minimum of 30 appropriate semester hours beyond the requirements of one degree have been earned).

Minor in Criminal Justice

A five course minor in criminal justice is available to baccalaureate degree-seeking students who are interested in careers in the criminal justice field. The courses that comprise the minor will provide students with the opportunity to relate to the special concerns of law enforcement, corrections, and the judicial systems. The minor is available on both campuses.

Requirements

Fifteen semester hours in criminal justice. The classes are to be selected from the following course list.

CCJ 3011	Nature and Causes of Crime	3
CCJ 3024	An Overview of Criminal Justice	3
CCJ 3123	Introduction to Crime Prevention	3
CCJ 3101	Law Enforcement Systems	3
CCJ 3271	Criminal Procedure	3
CCJ 3290	Judicial Policy Making	3
CCJ 3291	Judicial Administration-Criminal	3
CCJ 3306	Correctional Philosophy, Theory and Practice	3
CCJ 3307	Correctional Treatment Programs	3
CCJ 3321	Community Based Treatment	3
CCJ 3341	Offender Counseling	3
CCJ 3450	Institutional Organization and Administration	3
CCJ 3460	Human Resources in Criminal Justice	3
CCJ 3461	Developing Inter-personal Communication	3
CCJ 3471	Criminal Justice Planning	3
CCJ 3501	Juvenile Delinquency, Prevention, and Control	3
CCJ 3934	Contemporary Issues in Criminal Justice	3
CCJ 4032	Crime and the Media	3
CCJ 4124	Police and the Community	3
CCJ 4252	Criminal Justice and the Constitution	3
CCJ 4280	Law and Criminal Justice	3
CCJ 4282	Legal Issues in Corrections	3
CCJ 4331	Probation, Parole, and Community Programs	3
CCJ 4442	Administration of Correctional Institutions	3
CCJ 4453	Methods of Institutional Change	3
CCJ 4641	Organized Crime	3
CCJ 4462	Human Relations Training	3
CCJ 4630	Criminal Justice: The International Perspectiv	3
CCJ 4661	Terrorism and Violence in Criminal Justice	3
CCJ 4662	Criminal Justice and the Minority Community	3
CCJ 4663	Women, Crime, and the Criminal Justice System	3
CCJ 4952	Introduction to Legal Research	3
URS 4152	Research Methods for Urban and Regional Studies	3

Public Administration and Health Services majors cannot use core courses towards their minor.

It is the student's responsibility to contact the department from which the student wishes to receive the minor when they apply for graduation. This will ensure that the minor will be posted on their transcript.

Certificate Programs

Law and Criminal Justice Certificate

The Law and Criminal Justice academic certificate is designed to provide legally-conscious students with concepts and information utilized by law professionals. Study shall include casework, procedures, court processes, research methods, and other introductory course work designed to enhance careers in the legal profession.

Admissions

Students must be fully admitted to the Bachelor of Science degree in Criminal Justice or another bachelor degree program.

Certificate Award

The Certificate will be awarded upon completion of the required certificate courses and the bachelor degree requirements. The certificate will be posted on the student's transcript at the time the completion of the bachelor degree requirements is posted.

Required Criminal Justice Courses

The student shall complete a minimum of 18 semester hours of the following selected criminal justice courses with a minimum grade of "C" in each course. Core criminal justice courses will not count for Criminal Justice majors.

CCJ 3271	Criminal Procedure	3
CCJ 3290	Judicial Policy Making	3
CCJ 3291	Judicial Administration	3
CCJ 4032	Crime and the Media	3
CCJ 4252	Criminal Justice and the Constitution	3
CCJ 4280	Law and Criminal Justice	3
CCJ 4282	Legal Issues in Corrections	3
CCJ 4752	Legal Research	3
CCJ 5216	Criminal Law	3
CCJ 5235	Criminal Procedure	3
CCJ 5286	Comparative Law	3

Course Descriptions

Definition of Prefixes

CCJ-Criminology and Criminal Justice; URS-Urban and Regional Studies. F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

CCJ 3011 The Nature and Causes of Crime (3). Issues involved in defining, measuring and explaining crime. The course focuses on patterns and trends in crime and the extent to which current theories explain those patterns and trends. (F,S,SS)

CCJ 3024 An Overview of Criminal Justice (3). An in-depth survey/overview of the process of criminal justice focusing on that process as a system and the different models by which the system can be viewed. Focus will be on the role and interrelationship of the various components of the system. (F,S)

CCJ 3101 Law Enforcement Systems (3). A study of the American police system that examines the origins, functions, and operations of policing modern society. (F,S,SS)

CCJ 3123 Introduction to Crime Prevention (3). To provide the student with the understanding of the scope and activities involved in crime prevention functions and its relationship to the total protection of the individual in society and the CCJ system. (F,S)

CCJ 3271 Criminal Procedure (3). An in-depth study of the 4th through 8th Amendments of the Constitution, and their impact on the criminal justice process. (F,S,SS)

CCJ 3290 Judicial Policy Making (3). Analysis of the Federal and State judicial systems and their impact upon legal, social, and political environments. Emphasis shall be placed upon the roles of the prosecution, defense, and the judiciary in the processing of cases through the court system. (F,S,SS)

CCJ 3291 Judicial Administration-Criminal (3). Historical and contemporary overview of the concepts of court administration, organization, management, and delivery of court services. Primary emphasis shall be upon judicial roles, practices, decision-making and accountability. Within this framework, this course focuses upon an in-depth consideration to both the federal and state court systems. (F,S,SS)

CCJ 3306 Correctional Philosophy, Theory and Practice (3). Critical analysis of contemporary correctional philosophy, theory and practice. Prisons, probation, parole, work-release, halfway house, community based corrections programs, and other practices are examined historically and in their current settings. (F,S,SS)

CCJ 3307 Correctional Treatment Programs (3). Study of the types of treatment programs and services that are provided to offenders in correctional institutions, with an emphasis on operational problems and the overall effectiveness of these programs. (F)

CCJ 3321 Community Based Treatment (3). An examination of the various pre-trial and post-trial community based treatment and supervision programs. Emphasis will be placed on the impact of these programs on the criminal justice system and the offender. (S,SS)

CCJ 3341 Offender Counseling (3). The nature and function of counseling and casework in various correctional settings, including the theoretical basis for various approaches, individual and group methods of counseling, and the effectiveness and limitations of counseling. (S)

CCJ 3450 Institutional Organization and Administration (3). Analysis of internal organizational structure and executive roles and functions in criminal justice agencies. Examines administrative and managerial concepts underlying decision making, policy formulation, operational strategies, and coordination and control procedures.

CCJ 3460 Human Resources in Criminal Justice (3). Concepts, issues, and applications of management styles and strategies within an organizational setting; leadership approaches; goal setting; career development and selection; motivation; communications and change; efficiency and effectiveness in measuring individual and group performance. (S)

CCJ 3461 Developing Interpersonal Communication (3). The emphasis of this course is on the development of interpersonal communication practices that can be effectively utilized in a helping role and on the job, to improve interaction among employees and the public.

CCJ 3471 Criminal Justice Planning (3). Planning methods applicable to criminal justice agencies and crime control on local, state, regional and national levels. Theories, techniques, and applications of planning as a decision making process for criminal justice agencies and entire systems. (SS)

CCJ 3501 Juvenile Delinquency, Prevention and Control (3). Course focuses upon the nature of juvenile delinquency and on patterns of delinquency historically and currently and the theories that attempt to explain delinquency; a description and critique of the juvenile justice system. (F,S)

CCJ 3934 Contemporary Issues in Criminal Justice (3). An extensive examination of selected contemporary issues in criminal justice. May be repeated. (F,S,SS)

CCJ 4032 Crime and the Media (3). An examination of the role of the media in reporting crime and the extent to which media coverage of crime and the criminal justice system impacts the commission of crimes and the operation of the system. (F,S,SS)

CCJ 4071 Computers Application in the Criminal Justice System (3). Use of computers as management tools with emphasis on microcomputer applications in the administration of police, courts, corrections and juvenile agencies and computer related criminal justice issues.

CCJ 4130 Police and the Community (3). Relationships between the police and the community with emphasis upon the police role in managing areas of tension and potential conflict, such as the problems of racial/ethnic minorities or civil disobedience. (F,S)

CCJ 4252 Criminal Justice and the Constitution (3). A case law study of constitutional issues as they relate to the administration of criminal justice; emphasis on the establishment of case precedent and its impact upon the Criminal Justice System. (F,S,SS)

CCJ 4280 Law and Criminal Justice (3). An analysis of historical and contemporary legal dilemmas confronting the criminal justice system. Existing categories of law, sanctions, legal theories, and schools of jurisprudence shall be reviewed to assist practitioner in decision making and problem resolution. (F,S,SS)

CCJ 4282 Legal Issues in Corrections (3). An analysis of contemporary legal decisions regarding the rights and responsibilities of prisoners, correctional administrators, and correctional officers. Emphasis shall be placed upon legal problems involved in pre-sentence investigations, parole, incarceration, and loss and restoration of civil liberties. (S,SS)

CCJ 4331 Probation, Parole and Community Programs (3). History, organization, administration, and effectiveness of probation, parole and community programs for criminal offenders. (F,S)

CCJ 4440 Administration of Correctional Institutions (3). Theories and techniques of administering correctional institutions; planning and decision making; correctional law; security and custody; physical plant, and inmate programs; the social structure of the prison community and inmate social systems. (F,S)

CCJ 4453 Methods of Institutional Change (3). A critical examination and analysis of external factors influencing the administration of justice; discussion of the impacts of public perceptions and attitudes, social values, political climate, legal constraints, and organized social movements upon all levels of criminal justice.

CCJ 4462 Human Relations Training (3). An experience-based course that will prepare selected students to present human relations training programs in criminal justice agencies.

CCJ 4630 Criminal Justice: The International Perspective (3). A comparative analysis of three types of criminal justice: common law systems (e.g., the U.S.); civil law systems (e.g., Germany); and socialist law systems.

CCJ 4641 Organized Crime (3). Historical development of organized crime in the U.S.; defining "organized crime" from U.S. and international perspective; patterns of criminal activity; critique of police and prosecutorial efforts to curb organized crime. (S)

CCJ 4660 Crime and the Schools (3). Nature and extent of crimes committed against students, faculty and schools (arson, vandalism); patterns of drug abuse in the schools; characteristics of offenders and etiology of crime in the schools; description and critique of efforts by schools and juvenile justice system to curb crime in the schools.

CCJ 4661 Terrorism and Violence in Criminal Justice (3). The nature and causes of terrorism within the western world; analysis of particular terrorist groups focusing on their cultural background and objectives; critique of political, military, and law enforcement efforts to curb terrorism. (S)

CCJ 4662 Criminal Justice and the Minority Community (3). Patterns and trends in victimization and offending by different racial/ethnic groups; explanations for racial/ethnic variations in offending and victimization; definitional issues involved in terms "racism," "prejudice," etc.; extent of discrimination/disparity at various points of the criminal justice system. (S)

CCJ 4663 Women, Crime and the Criminal Justice System (3). Women as deviants, criminals, victims, and professionals in the criminal justice system. (S)

CCJ 4752 Introduction to Legal Research (3). This course is designed to introduce students to basic legal research methods for use in a criminal justice agency or private para-professional setting. The reporter systems, federal and state, digest, etc. shall be emphasized.

CCJ 4900 Directed Readings in Criminal Justice (1-3). Extensive reading and analysis of selected criminal justice literature under faculty supervision. Permission of the instructor and Program Director is required prior to course registration. One credit per semester with a 3 credit cumulative maximum. (F,S,SS)

CCJ 4910 Independent Research (1-3). A course designed to provide qualified students with the opportunity to perform meaningful research in areas of criminal justice under the direction of a faculty member. Permission of the instructor required (6 credits cumulative maximum). (F,S,SS)

CCJ 4940 Field Work and Special Projects (1-12). A course designed to broaden the experiential base, and application of theoretical content to the criminal justice field. Advisor's approval required. (Pass/Fail grading). (F,S,SS)

CCJ 4949 Cooperative Education in Criminal Justice (1-3). Supervised full time work semester for criminal justice academic majors who demonstrate their interest in and potential for developing practical field agencies experience. Limited to students admitted to Co-op Program with consent of advisor. Prerequisite: Senior academic standing. (F,S,SS)

URS 4112 Computer Applications for Urban Services (3). The study of computer applications for administrative analysis of financial and program data with emphasis on design, interface, and data structures. (F,S,SS)

URS 4152 Research Methods for Urban and Regional Studies (3). The intent of this course is to familiarize students with the basic approaches used in contemporary social research with applications in public sector settings. Emphasis will be placed on the survey, interviewing, and quasi-experimentation approaches. These three approaches are most likely to be utilized in management decision making in government. Prerequisites: URS 4112 or equivalent. (F,S,SS)

Health Services Administration

Andrew Batavia, *Associate Professor*
David Bergwall, *Associate Professor and Associate Dean*
Gloria Deckard, *Associate Professor and Associate Director*
Thomas Dunaye, *Professor*
Burton Dunlop, *Senior Lecturer*
Rosebud Foster, *Professor*
Gerald Mills, *Assistant Professor*
Frederick Newman, *Professor*
Martha Pelaez, *Senior Lecturer*
Max Rothman, *Senior Lecturer*
Vandon White, *Professor*

The Program in Health Services Administration offers graduate and undergraduate studies leading to Bachelor's and Master's degrees in Health Services Administration.

The Health Services Administration program is fully accredited by the Accrediting Commission on Education in Health Services Administration (ACEHSA).

The baccalaureate program provides professional education which prepares mid-level and program administrators practicing various management func-tions in community based health care settings.

The management of health services occurs in an environment of organizational and technological change. Administrators charged with executive responsibilities must be grounded in a high degree of formal professional training followed by lifelong learning which fosters their continuous professional growth. Many of the same skills needed for executive management are now also required to provide administrative leadership in staffing, directing, coordinating, and controlling the operational resources of administrative and clinical units in such organizations.

Health Services Administration Programs

The Bachelor of Health Services Administration (BHSA) qualifies students for entry-level management positions in health services delivery organizations. The program provides professional education for administrative occupations in various health care settings. The degree also prepares individuals for further study in health services administration. It is an excellent career development pathway for persons licensed in clinical health and medical care professions but lacking an undergraduate degree.

Nursing Home Administration

The BHSA with the nursing home administration specialization is approved by State of Florida, Department of Professional Regulation, Nursing Home Administration Licensure Board. Students completing the degree with this specialization are eligible to sit for the state nursing home administrator licensure examination.

Bachelor of Health Services Administration

Degree Program Hours: 120

Admissions Requirements

Students seeking admission into the bachelor's program must meet the following minimum requirements:

1. An Associate in Arts degree or its equivalent (e.g., Associate in Science) in lower-division course work (60 semester hours) completed in the first two years of preparation at an accredited college or university, with a minimum 2.0 cumulative grade point average.

2. The maximum of lower-division transfer credits is 60 semester hours. Upper division credit hours from another institution or department may be transferred up to a maximum of 30 semester hours toward the fulfillment of required or elective courses in the program.

3. Admitted applicants must meet all general educational requirements of the University. Students with one deficiency will be admitted and applicants with two or more deficiencies will only be admitted with Program approval.

4. Any other general admissions requirements of undergraduate programs at the University as found in the catalog of the current academic year.

5. Students who have not completed the admission process may register as Affiliated Students pending admission. A maximum of 15 semester hours taken as an affiliated student can be used toward a degree. Affiliated status does not guarantee admission to the bachelor's program.

Admissions

Once students complete 60 semester hours, they may apply for admission into the program. FIU undergraduates who have met the Core or the General Education lower division requirements, who have passed the CLAST, and who have a grade point average (GPA) of above a 2.0 will qualify for admission

to the program. (Meeting these requirements will not guarantee admission to the program).

Program Requirements

All program students completing the BHSA are also subject to undergraduate student regulations and degree requirements governed by the policies of the College of Urban and Public Affairs, Florida International University, and the State University System. Undergraduate HSA majors must receive a grade of 'C' or higher in all core courses.

Courses are sequenced to enhance the development of competencies as students progress through the curriculum. Students need to pay particular attention to course prerequisites.

Lower Division Preparation

Students desiring to major in health services administration are required to take six hours in accounting and three hours of micro-economics as a part of their lower division preparation.

Students who have not met these prerequisites will be required to take the following upper-division courses at the University:

ECO 3021	Economics and Society-Micro	3
ACG 3024	Accounting for Managers and Investors	3

These courses must be completed within one year after the student has been admitted into the program.

Core courses required of all students: (36)

Group 1

HSA 3103	Health and Social Service Delivery Systems	3
URS 4112	Computer Applications for Urban Services	3
URS 3001	Introduction to Urban and Regional Studies	3
URS 4152	Research Methods for Urban and Regional Studies	3
URS 4643	Introduction to Management of Public, NonProfit and Health Organizations	3

Group 2

HSA 4110	Health Organizational Behavior	3
HSA 4170	Health Care Financial Management	3
HSA 4184	Human Resource Management	3
HSC 4500	Principles of Applied Epidemiology	3

Group 3

HSA 4141	Program Planning and Evaluation	3
HSA 4150	People, Power, and Politics in Health Affairs	3
HSA 4192	Health Management Systems Engineering	3
HSA 4421	Legal Aspects and Legislation in Health Care	3

Areas of Specialization (*one required*)
Specialization courses should not be taken until students have completed all courses in Group 1 and Group 2.

Management Specialization:

(Nine credits in addition to 12 credits of electives)

HSA 4183	Applied Management in Health Care Organizations	3
MAR 3023	Marketing Management	3
URS 4061	Values, Ethics and Conflict Resolution	3

Nursing Home Administration

(18 credits in addition to 3 credits of electives)

HSA 5177	Finance and Reimbursement for Long Term Care Facilities	3
HSA 5225	Long Term Care Management I	3
HSA 5227	Long Term Care Management II	3
HSA 5816	Practicum in Long Term Care Management	3
HSA 5876L	Administrative Residency in Nursing Home Setting	6

(Plus 9 hours of electives)

Elective Courses (3 or 12 semester hours based on specialization)

HSA 4104	Team Approach to Health Services Delivery	3
HSA 4113	Issues and Trends in Health Care Delivery	3
HSA 4183	Applied Management in Health Care Organizations	3
HSA 4905	Independent Study	3
HSA 5935	Special Topics in Health Services	3
HSA 4850	Administrative Internship	6
HSA 5226	Management in Long Term Care Systems	3
HSA 5876L	Administrative Residency in Nursing Home Setting	6

Elective courses may include upper-division courses offered by other University departments with the approval of a Health Services Administration Advisor.

Non-Degree Seeking Student

Non-degree seeking students who wish to register for 5000-level courses may do so with the permission of the instructor. University regulations pertaining to non-degree seeking status must be observed.

Internship

Students electing an administrative internship generally begin their internship in the final semester of the degree requirement. If this period of field placement is evaluated by the Program Coordinator as successful, the student will graduate at the end of that semester provided that all other requirements have been met.

All students must achieve a GPA of 2.5 or higher in all upper-division course work before they are permitted to enroll in the Administrative Internship (HSA 4850). Students must apply for the internship, be approved and placed in an agency by the Program in the semester before the administrative internship begins.

For further information regarding internship placements, reference should be made to the Program Policy and Procedures Statement on the Administrative Internship.

Minor in Health Services Administration

A five course minor in health services administration in available to baccalaureate degree seeking students who are interested in careers in health services administration or who wish to examine the administrative aspects of health services delivery.

Requirements

Fifteen hours in Health Services Administration are to be selected from the following list. (HSA 3103 and URS 4643 or equivalent are required for the minor. The other nine hours may be selected from the following, providing all prerequisites have been met):

HSA 4104	Team Approach to Health Services Delivery	3
HSA 4110	Health Care Organizational Behavior	3
HSA 4141	Program Planning and Evaluation	3
HSA 4150	People, Power and Politics in Health Care	3
HSA 4170	Health Care Financial Management	3
HSA 4184	Human Resources Management	3

HSA 4183	Applied Management in Organizations	3
HSA 4192	Health Management Systems Engineering	3
HSA 4421	Legal Aspects and Legislation in Health Care	3
HSA 5225	**Long Term Care Management I**	
HSA 5226	Management in Long Term Care Systems	3
HSA 5227	Long Term Care Management II	3
HSA 5177	Financing and Reimbursement in Long Term Care Facilities	3
HSA 5816	Practicum in Long Term Care Management	3
HSC 4500	Principles of Applied Epidemiology	3
URS 4112	Computer Applications for Urban Services	3
URS 4061	Values, Ethics and Conflict Resolution	3
URS 4643	Introduction to Management of Public, NonProfit and Health Organizations	3

Public Administration and Criminal Justice majors cannot use core courses towards their minor.

While the student may choose any course from the above list, the department strongly recommends that the student take the follosing courses to complete the minor:

HSA 3103	Health and Social Service Delivery Systems *(required)*
URS 4643	Intro to Management of Public, Non-Profit, and Health Organizations *(required; cannot be used by Public Administration majors as part of the minor)*
HSA 4170	Health Care Financial Management
HSC 4500	Principals of Applied Epidemeology
HSA 4183	Applied Management in Health Care Organizations
HSA 4150	People Power and Politics in Health Affairs *(recommended for Public Administration majors)*

It is the student's responsibility to contact the department from which the student wishes to receive the minor when they apply for graduation. This will ensure that the minor will be posted on their transcript.

Course Descriptions

Definition of Prefixes

HSA - Health Services Administration; HSC - Health Sciences; URS-Urban and Regional Studies

HSA 3103 Health and Social Service Delivery Systems (3). Students examine the history and current functions of health and social services delivery systems in the United States. Focus is on the components, their interaction and internal/external controls.

HSA 3123 Mental Health and Mental Retardation (3). The student will examine the community mental health services and services for the mentally retarded from a historical, policy, legislative, and systems perspective.

HSA 3180 Management for the Health Professions (3). Fundamental theories, principles, and concepts of management are surveyed to prepare the student for a middle-management position in health care. Case studies are utilized for practical application.

HSA 4104 Team Approach to Health Service Delivery (3). Team formation, structure, composition, maturity, growth, and the process are identified. Team management in health facilities are discussed. Prerequisite: URS 4643 or permission of the instructor.

HSA 4110 Health Care Organizational Behavior (3). Analysis of organizational behavior and its implications for management in health care systems. Prerequisites: URS 4643.

HSA 4113 Issues and Trends in Health Care Delivery (3). Issues and trends in policy questions involving health care organizations, financing, quality controls, and delivery of services are addressed. (S,SS)

HSA 4141 Program Planning and Evaluation (3). Basic concepts of planning and evaluation as the fundamental tools of program design and development are examined. Prerequisites: URS 4112, URS 4152, or permission of the instructor. (F,S)

HSA 4150 People, Power and Politics in Health Affairs (3). Community power structures are analyzed as to their function in politics and decisions governing health care. The health professional's role is studied with respect to the political process in health care. Prerequisites: URS 4643, HSA 3103, or permission of the instructor.

HSA 4170 Health Care Financial Management (3). Financial management methods and procedures for health care institutions. Prerequisites: Accounting, microeconomics, URS 4112.

HSA 4183 Applied Management in Health Care Organization (3). Management theory and principles are examined in their application to the administrative process. Case studies are emphasized to illustrate operational conditions found in health care settings. Strategic Management is emphasized. Prerequisites: URS 4643, HSA 4110, or permission of the instructor.

HSA 4184 Human Resources Management and Supervision. (3). The role of health care supervisors is examined with respect to interviewing, performance appraisal, disciplining, counseling, job orientation, in-service education and responsibilities. Prerequisites: HSA 3103 or permission of the instructor.

HSA 4192 Health Management Systems Engineering (3). Introduction to health systems analysis and application of industrial engineering techniques including work systems, job analysis, space utilization, inventory control, and traffic patterns are studied. Prerequisite: URS 4643, HSA 4110, URS 4112 or permission of the instructor.

HSA 4193 Automated Management and Information Systems (3). The analysis, design, and installation of management information systems in health care organizations is studied. Evaluation of computer systems from several perspectives are examined. Prerequisite: HSA 4192 or permission of the instructor.

HSA 4421 Legal Aspects and Legislation in Health Care (3). Corporate structure and legal liabilities of health care institutions and professionals is studied from a local, state, and federal regulatory position. Prerequisites: HSA 4110, HSA 4150, or permission of the instructor.

HSA 4700 Fundamentals of Health Research Methods (3). Introduction to health research method's tools including literature research, research report analysis covering research design, and data analysis and report writing are examined and practiced. Prerequisites: HSC 4500, URS 4152, or permission of the instructor.

HSA 4850 Administrative Internship (1-6). The student who has completed all required upper division course work is provided an opportunity to observe and engage in administrative practice in a health care setting. Prerequisite: Completion of all curriculum required course work and approval of the coordinator.

HSA 4905 Undergraduate Independent Study (1-3). Students take part in in-depth research or an action-oriented project under the supervision of their faculty advisor. Preparation and approval of the content must be made one semester in advance. Prerequisite: Permission of faculty advisor.

HSA 5177 Financing and Reimbursement for Long Term Care Facilities (3). This course introduces the theory and practice of government regulations as they pertain to long term care facilities. The program seeks to identify the critical elements for securing payments for service and study relevant capital investment procedures and policies. Prerequisite: HSA 5225. Corequisite: HSA 5227.

HSA 5225 Long Term Care Management I (3). Long term care facility organization and management are studied. Management implications of the social, economic, financial, and regulatory environment of nursing homes are examined. Prerequisite: URS 4643, HSA 4110 or the equivelant.

HSA 5226 Management of Long Term Care Systems (3). Organizational, financial, and policy issues in the management of long term care systems in the U.S. with special emphasis on the State of Florida.

HSA 5227 Long Term Care Management II (3). Survey of theories of gerontic care for understanding the aging process. Focus is on the application of knowledge of the aging process to management and care giving in nursing homes. Prerequisite: HSA 5225.

HSA 5455 Ethical Decisions in Health Services Administration (3). This course will study ethical principles as they apply to areas of management, supervision and clinical practice in the delivery of health care. Emphasis is on managerial decision-making. Prerequisites: HSA 5125, HSA 6185.

HSA 5816 Practicum in Applied Management in Long Term Care (3). Students will spend 180 hours in supervised practice in a nursing home setting. They carry out managerial responsibilities related to the administration of the facility. Corequisite: HSA 5227.

HSA 5876L Administrative Residency in Nursing Home Setting (6). 480 hours of supervised practice in a selected nursing home. To provide experience in organization and management within the nursing environment. Prerequisites: HSA 5816, HSA 5225, HSA 5226, HSA 5227.

HSA 5935 Special Topics Seminar in Health Services (3). Students investigate topics of interest in health care services through lectures by the faculty and guest speakers. May be repeated. Prerequisite: Permission of faculty advisor.

HSC 4500 Principles of Applied Epidemiology (3). Methods and techniques used by epidemiologists investigating the distribution and causes of diseases are studied. A holistic approach to principles of disease surveillance and control is studied. Prerequisite: HSA 3103 and URS 4152.

URS 3001 Introduction to Urban and Regional Studies (3). An integrated approach to the problems and prospects of metropolitan areas with emphasis on economic, political, social and administrative facets of the urban setting.

URS 4112 Computer Applications for Urban Services (3). The study of computer applications for administrative analysis of financial and program data with emphasis on design, interface, and data structures.

URS 4152 Research Methods for Urban and Regional Studies (3). Basic statistics and quantitative analysis are introduced to students for application with clinical and supervisory management problems encountered in health care settings. Prerequisite: College algebra or equivalent, URS 4112.

URS 4643 Introduction to Management of Public, Nonprofit and Health Organizations (3). Fundamental theories and principles of management in public, nonprofit, and health service organizations.

Public Administration

Harvey Averch, *Professor*
Ronald M. Berkman, *Professor and Dean*
James Carroll, *Professor and Doctoral Coordinator*
Milan Dluhy, *Professor of Public Administration and Social Work*
Howard Frank, *Associate Professor, Acting Director*
Jean-Claude Garcia-Zamor, *Professor*
Donald Klingner, *Professor*
Ralph G. Lewis, *Associate Professor*
Valerie L. Patterson, *Visiting Assistant Professor*
Lourdes Rassi, *Visiting Professor and Director of Student Services*
Keith Revell, *Assistant Professor*
Allan Rosenbaum, *Professor*
Barbara Yarnold, *Associate Professor*

Bachelor of Public Administration

Degree Program Hours: 120

The Bachelor of Public Administration (BPA) degree is offered for students interested in beginning a public service career upon completion of their undergraduate work and for those who wish to continue in public administration at the graduate level.

Admission Requirements

A student must complete an Associate in Arts degree at a Florida public community college or have earned 60 semester hours of college credit at any other accredited institution at an acceptable performance level to be considered for admission.

Students with an Associate in Science degree or 60 semester hours will be accepted but must complete the General Education requirements before the bachelor's degree can be awarded.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST, completed 60 semester hours, and must be otherwise acceptable into the program.

Common Prerequisites

CGS 2060	Introduction to Microcomputers
ECO 2013	Macroeconomic Principles
POS 2041	American Government

Lower Division Preparation

It is recommended that applicants complete the Associate of Arts degree (60 semester hours) in the lower

division and the General Education course requirements.

It is required that students have completed one course in American Government, one course in Microeconomics, and one course in Statistics. Three credits in History, and three credits in Public Administration are recommended.

Upper Division Program

Students must complete 60 credit hours at the 3000 level or greater.
Students must complete the following requirements:

1. Introduction to Public Administration (PAD 3003).
2. Eleven core courses.
3. Four courses in an administrative area of concentration to be taken within or outside the Program.
4. Three general electives.
5. A three credit internship PAD 4940 or PAD 4934 (Integrative Seminar in Public Administration.)

Students must earn a grade of 'C' or higher in each of the 11 core courses, PAD 3003, the concentration electives and the internship or integrative seminar. A 'C-' is not acceptable and must be repeated.

Core Courses: (33)

Policy

PAD 3034	Public Policy and its Administration	3
PAD 4034	Public Policy Analysis and Program Evaluation	3
PAD 3251	Introduction to Public Economics	3
URS 3001	Introduction to Urban and Regional Studies	3

Quantitative Skills

URS 4152	Research Methods for Urban and Regional Studies	3
URS 4112	Computer Applications for Urban Services	3

Public Management

URS 4643	Introduction to Management of Public, Nonprofit, and Health Organizations	3
PAD 4223	Public Sector Budgeting	3
PAD 4414	Personnel Skills for Administrators	3
PAD 3438	Communication Skills for Public Administrators	3
URS 4061	Values, Ethics, and Conflict Resolution	3

Concentration Electives: (12)

Four additional courses must be taken but may be completed within or outside the Program. Those courses selected must be approved by the Program Coordinator as being related to the student's program of study. These may be additional courses in or outside the Program including courses that constitute part of a minor or a certificate program in another department. Such a minor or certificate program should be relevant to the chosen administrative area of concentration.

Additional Electives: (9)

Three courses will consist of general course work to be completed outside the Department. Students choosing a minor or a certificate program for their concentration-related electives may complete those program requirements as general electives for the BPA, if necessary.

Internship or Integrative Seminar: (3)

Students with no relevant employment experience are strongly encouraged to complete an internship in an appropriate public agency. All others must complete PAD 4934 Integrative Seminar in Public Administration.

Minor in Public Administration

A five-course minor in Public Administration is available to baccalaureate degree-seeking students who are interested in careers in public management. The courses that comprise this minor will provide students with the opportunity to develop specialized skills in such areas as urban administration, organizational change, personnel management, and budgeting and financial management. The minor is available on both campuses.

Requirements

Fifteen semester hours in Public Administration. Classes are to be selected from the following course list:

PAD 3033	Administrators and the Legislative Process	3
PAD 3034	Public Policy and Its Administration	3
PAD 3413	Organizational Group Processes	3
PAD 3430	Personal Growth and Administrative Development	3
PAD 3804	Government and Administration of Metropolitan Areas	3
PAD 3834	International Comparative Administration	3
PAD 4024	Concepts and Issues in Public Administration	3
URS 4061	Values, Ethics, and Conflict Resolution	3
PAD 4103	Politics of Administrative Organization	3
PAD 4223	Public Sector Budgeting	3
PAD 4414	Personnel Skills for Administrators	3
PAD 4432	Administrative Leadership and Behavior	3
PAD 4603	Administrative Law	3
PAD 5041	Values and Technology in Modern Society	3
PAD 5256	Public Economics and Cost Benefit Analysis	3
PAD 5427	Collective Bargaining in the Public Sector	3
PAD 5435	Administrator and the Role of Women	3
PAD 5443	Public Administrator and Media Relations	3

Criminal Justice and Health Services majors cannot use core courses towards their minor.

You may choose other courses from the list provided in the Undergraduate Catalog, however, the following five courses are highly recommended to complete your minor:

PAD 5256	Public Economics and Cost Benefit Analysis
PAD 4223	Public Sector Budgeting
PAD 4414	Personnel Skills for Administrators
PAD 3104	Organization and Administrative Theory
PAD 3804	Government and Administration of Metropolitan Areas

It is the student's responsibility to contact the department from which the student wishes to receive the minor when they apply for graduation. This will ensure that the minor will be posted on their transcript.

Course Definitions

PAD-Public Administration; URS-Urban and Regional Studies

Course Descriptions

PAD 3003 Introduction to Public Administration (3). The course will provide an overview of the field of public administration by focusing on its development and importance in modern government operations. The course will also review operation of government at local, state, and federal levels.

PAD 3033 Administrators and the Legislative Process (3). A study of executive-legislative interactions; the impact of legislation and legislative

processes on administrative policy decision-making and implementation; the influence of administration on the legislating process.

PAD 3034 Public Policy and Its Administration (3). Examines the formulation, implementation, and evaluation of governmental efforts at federal, state, and local levels.

PAD 3104 Organization and Administrative Theory (3). Historical survey of theories of public organization and of contemporary and emerging theories and management issues, with special attention to the role of bureaucratic theory and behavior. Case investigation of bureaucratic experience in federal, state and local levels will be conducted.

PAD 3251C Introduction to Public Economics (3). This course provides an introduction to the applied economics of the public sector and the microeconomics of public policy making and administration. It also provides an introduction to benefit-cost & cost-effectiveness analysis.

PAD 3413 Organizational Group Processes (3). The impact of various organizational climates, tasks, roles, and reward systems, on the behavior of both the individuals and groups of employees in public organizations. Particular attention is given to alienation and motivation in job effectiveness and Public Service.

PAD 3430 Personal Growth and Administrative Development (3). The administrator as a person. Development of interpersonal skills. Self evaluation and career planning. Training and education for the public service sector.

PAD 3438 Communication Skills for Public Administrators (3). Designed to enable students to develop oral and written skills required to communicate effectively in a public organization setting.

PAD 3804 Government and Administration of Metropolitan Areas (3). An intensive analysis of administrative problems in large complex urban areas encompassing many political entities. Examines overlapping relations among municipalities with special attention given to Miami-Dade County as well as current trends in public management and future directions for change. (F,S)

PAD 3834 International Comparative Administration (3). This course is an introduction to a wide range of scholarly and practical 'applied' interests. Emphasis is on institution-building and development administration, particularly within the Third World countries.

PAD 3949 Cooperative Education (3). Supervised work experience in public or quasi-public organization. Placement is made through the Office of Cooperative Education. Completion of required courses in public administration and consent of Program Director required.)

PAD 4024 Concepts and Issues in Public Administration (3). The function of administrative institutions in society. The growth of administration through the bureaucratic model both as an art and a science. Contemporary and comparative forms and theories of organization. Responsibilities of public servants.

PAD 4034 Public Policy Analysis and Program Evaluation (3). Provides an introduction to the analysis and evaluation of public policies and programs. The main tools and techniques of policy analysis will be discussed. Students will apply techniques to selected policy problems.

PAD 4103 Politics of Administrative Organization (3). The role of political processes in relationship to public organizations and the types of intra- and inter-organizational politics which are unique to public organizations. Effects of these political processes upon organizational performance and their role in promoting or thwarting organizational change.

PAD 4223 Public Sector Budgeting (3). The theory and practice of various approaches to budgeting, including time-item, performance, PPBS budgeting. Special emphasis on the role of the budget in shaping the program and performance and policy direction of public organizations.

PAD 4414 Personnel Skills for Administrators (3). The general nature of public personnel administration; the development of the civil service system; concepts and issues currently applicable at the federal, state, and local levels of government.

PAD 4432 Administrative Leadership and Behavior (3). Designed to expose students to a systematically related set of concepts for diagnosing human behavior in organizations; and to establish a positive value for the analysis of problems involving people, structure, environment, task technology, and situational climate.

PAD 4603 Administrative Law (3). Surveys the principles of law from the perspective of the public administrator; administrative procedure; procedural due process; delegation of legislative power; regulatory administration; conflict-of-interest statutes, etc.

PAD 4905 Independent Study in Public Administration (1-6). (Normally 3 credit hours) Individual conferences, supervised readings; reports on personal investigations; and similar undertakings. Prerequisites: Completion of required courses in public administration is expected. Consent of faculty sponsor and Program Director required.

PAD 4934 Integrative Seminar in Public Administration (3). The Terminal course of the program. Students will integrate course-work and theory into the analysis of a public policy or public management problem and produce a final seminar paper. Prerequisites: Complete core and Specialization.

PAD 4940 Public Administration Internship (3-6). (Normally 3 credit hours) Supervised work experience in a public or quasi- public organization. Involves a variety of professional and technical job duties depending on the agency. Prerequisites: Completion of required courses in public administration is expected. Consent of internship coordinator and Program director required.

PAD 4949 Cooperative Education (3). Supervised work experience in public or quasi-public organization. Placement is made through the Office of Cooperative Education. Prerequisites: Completion of required courses in public administration, PAD 3949, and consent of Program Director required.

PAD 5041 Values and Technology in Modern Society (3). Surveys personal and societal value assumptions in the context of the technological society. Examines organizational-societal value structures, and the ways in which technology creates rapid change and new alternatives in values. Also the interrelationship of the past, present and future is explored, through futurism and forecasting techniques.

PAD 5043 Government and Minority Group Relations (3). Explores the pressing contemporary issue of the

relationship between government and minorities. Examines the clash between established institutional values and minority group values, and surveys remedial programs aimed at dealing with the problem. Comparative case studies will be used to analyze public agencies' internal relations with minorities (recruiting, selection, etc.), as well as their different responses to the minority groups they serve.

PAD 5256 Public Economics and Cost Benefit Analysis (3). This course provides the quantitative and qualitative tools and case material to solve allocation problems in the public sector. A rigorous introduction to applied microeconomic theory is provided as well as an introduction to welfare economics. Market and government failure are analyzed as are the public alternatives available. The economics of innovation is contrasted to the benefit-cost analysis, cost effectiveness analysis and systems analysis are presented. The ethics of applied practice are discussed via actual cases and the important skills of communicating with decision makers are taught.

PAD 5416 Social Equity and Human Resource Management (3). The course deals with the human resource management issues arising from equity and affirmative action requirements in the workplace.

PAD 5427 Collective Bargaining in the Public Sector (3). The course deals with the nature and implications of collective bargaining for managers and employees in (and students of) public organizations. The course emphasizes similarities and differences between the private and public sectors, as they apply to collective bargaining.

PAD 5435 Administrator and the Role of Women (3). The course is designed for women and men who are interested in moving into management positions, or who have done so and want to broaden their understanding of the changing role of women. Classes will allow for experimental as well as academic exploration of the issues. The course will also explore design, implementation, and evaluation of affirmative action programs.

PAD 5443 The Public Administrator and Media Relations (3). Surveys the government-mass communication media relationship, and then concentrates on the ways in which public managers handle media relations. Emphasis throughout is placed on questions of information-handling unique to public organizations, involving, for example, adherence to Florida's Sunshine Law and the Federal Freedom of Information Act.

PAD 5460 Productivity Improvement (3). Provides measures to improve organizational and worker productivity using applied behavioral science.)

PAD 5616 Contracting and Managing Third Party Governments (3). Analyzes the legal foundations, administrative and economic characteristics of government instrumentalities as they are used to pursue public policy. Analyzes how and why different combinations of instrumentalities are used in different policy areas.

PAD 5660C Applied Legal Context of Public Administrators (3). An overview of constraints and latitude the legal system grants to public administrators and managers. Provides the applied legal information required to make effective decisions in the public sector.

PAD 5661C Management of Court-Agency Relations (3). Examines applied judicial-administrative relations with particular emphasis on administrative policymaking. Covers the legal, environmental, and political factors that influence administrative strategies of policy and program compliance. Prerequisite: PAD 5838.

PAD 5716 Management Support Systems in Public Organizations (3). The course examines a variety of computer-based management support applications used in public sector organizations. It also explores design and implementation issues endemic to the public sector.

PAD 5716L Information Systems for Public Organizations (1). This course will provide an overview of microcomputer and mainframe skills required for substantive course work in personnel, budgeting, and other core public sector functions.

PAD 5934 Contemporary Issues in Public Administration (1-3). An analysis of major conceptual issues currently facing public administrators. May be repeated.

URP 5314 Introduction to Urban Planning and Growth Management (3). An historic overview of land use planning and the rise of growth management with emphasis on implementation in complex market and political environments.

URP 5426 Emergency Management and Planning (3). This course focuses on the concepts, processes, and techniques associated with developing and implementing emergency management plans in public, nonprofit, and health organizations.

URS 3001 Introduction to Urban and Regional Studies (3). An integrated approach to the problems and prospects of metropolitan areas with emphasis on economic, political, social and administrative facets of the urban setting.

URS 4061 Values, Ethics, and Conflict Resolution (3). Theories of value: ethical systems and their influence on administration, behavior and process; the administrator as an ethical actor; value conflict and resolution; the philosophical basis of American thought.)

URS 4152 Research Methods for Urban and Regional Studies (3). The intent of this course is to familiarize students with the basic approaches used in contemporary social research with applications in public sector settings. Emphasis will be placed on the survey, interviewing, and quasi-experimentation-the three approaches most likely to be utilized in management decision making in government. Prerequisite: URS 4112 or equivalent.

URS 4643 Introduction to Management of Public, Nonprofit and Health Organizations (3). Fundamental theories and principles of management in public, nonprofit, and health service organizations.

URS 4931 Current Topics in Urban and Regional Studies (3). In-depth exploration of current, critical topics in the urban arena. Emphasis on multidisciplinary approaches to local issues impacted by increased globalization and competition among cities and regions. May be repeated for credit. Prerequisite: URS 3001.

URS 5505 Economic Development and Urban Revitalization (3). This course is an interdisciplinary examination of research and practice in contemporary economic development, with emphasis on successful implementation in a variety of settings.

URS 5645 Strategic Planning in Public and Nonprofit Organizations (3). This course exposes students to the

concepts associated with strategic planning of public and nonprofit organizations and provides them with practical experience in their use.

URS 5647 Continuous Quality Improvement (3). This course provides an in-depth exposure to the concepts, principles, and techniques associated with continuous quality improvement (CQI) applied to public, nonprofit, and health organizations.

School of Social Work

Ray J. Thomlison, Ph.D., *Professor And Director*
Velmarie Albertini, *Instructor and Student Services Coordinator*
L. Yvonne Bacarisse, *Associate Professor and Associate Dean for Undergraduate Studies (Administrative Leave)*
Tania Barriere-Perez, *Visiting Instructor and Field Coordinator*
Richard Beaulaurier, *Assistant Professor*
Arlene Brown, *Instructor and Field Coordinator*
Kevin G. Brown, *Instructor and Acting MSW Program Director*
Marian Dumaine, *Visiting Instructor*
Denise Gammouley, *Assistant Professor*
Andres Gil, *Assistant Professor and Associate Director for Research*
Mary Helen Hayden, *Assistant Professor and Undergraduate Program Coordinator*
Rosa Jones, *Associate Professor and Vice Provost (Administrative Leave)*
Monte Koppel, *Professor*
Jordan Kosberg, *Professor*
Welker Mitchell, *Instructor,School of Social Work and Assistant Dean*
Miriam Potocky- Tripodi, *Associate Professor and Ph.D. Program Corrdinator*
Betsy Smith, *Associate Professor*
Martin Sundel, *Professor*
Barbara Thomlison, *Visiting Professor and Acting Director, Institute for Children and Families at Risk*
Norma Threadgill, *Visiting Professor*
Michele Verdi, *Instructor and Acting Director of Field Practicum*
Eric F. Wagner, *Associate Professor And Driector, Teen Intervention Project*
Stephen Wong, *Associate Professor*

The School of Social Work offers graduate and undergraduate studies leading to the Bachelors and Masters degrees in Social Work. The School also offers a Ph.D. in Social Welfare.

This profession requires a high degree of knowledge, skill, and dedication; a desire and ability to work effectively with people and to help solve social problems; a scientific understanding of society and human behavior; skills of social work practice; and identification with values of the profession.

Bachelor of Science in Social Work

Degree Program Hours: 120

The program offers an integrated educational experience that combines the theoretical and the practical. It is designed to prepare the student for generalist practice as a beginning professional social worker, for entrance into a graduate school of social work, and for participation in society as an informed citizen.

The four semester program includes a sequence of academic courses as well as field instruction under qualified supervision in social agencies in South Florida.

The program is accredited by the Council on Social Work Education.

Common Prerequisites

POS 2042	American Government
BSC 2023	Human Biology
	or
PCB 2700	Foundations of Human Physiology
ECO 2013	Macroprinciples
	or
ECO 2023	Microprinciples
DEP 2000	Human Growth and Development
	or
PSY 2020	Introduction to Psychology
SYG 2000	Introduction to Sociology
	or
SYG 2010	Social Problems
STA 1013	Statistics for Social Services

Lower Division Preparation

The student desiring to major in Social Work must have completed the Associate in Arts degree at a Florida public community college, or equivalent work from an accredited institution.

Required Courses

Before admission to the Social Work program, the student must complete college-level courses in biology (including coverage of Human Biology) and statistics, 12 semester hours in the social and behavioral sciences, which must include one course each in sociology, psychology, economics and American government and eight to ten hours in a foreign language.

To qualify for admission to the program, FIU undergraduates must have met all the lower division requirements including CLAST,

completed 60 semester hours, have a minimum cumulative GPA of 2.5 and must be otherwise acceptable into the program.

For additional information regarding the undergraduate social work program of study and degree program requirements, contact the School directly.

Upper Division Program (60)

Required Courses: (45)

SOW 3113	Social Environment and Human Behavior I	3
SOW 3122	Social Environment and Human Behavior II	3
SOW 3232	Social Welfare Policy and Services I	3
SOW 3233	Social Welfare Policy and Services II	3
SOW 3302	Introduction to Social Work	3
SOW 3313	Methods of Social Work Practice I	3
SOW 3403	Social Work Research	3
SOW 4322	Methods of Social Work Practice II	3
SOW 4332	Methods of Social Work Practice III	3
SOW 4511	Field Experience I	8
SOW 4512	Field Experience II	8
SOW 4522	Integrative Field Seminar I	1
SOW 4523	Integrative Field Seminar II	1

Electives: With approval of the faculty advisor 15

Remarks: Students should be aware that courses in this program are sequenced. Students must check with their advisors for pre and corequisite courses. A grade of 'C' or higher (a grade of 'C-' is not acceptable) in all courses required for the major is necessary for graduation. A passing grade in field courses is required for continuation in the program. Field courses cannot be repeated.

Minor in Social Welfare

A five-course minor in social welfare is available to baccalaureate degree-seeking students who are interested in careers in the human services field or who wish to study how common human needs are addressed within social welfare programs. The courses that comprise the minor will provide students with the opportunity to relate to the special concerns of our region, including poverty, crime and delinquency, child abuse and neglect, and family instability. The minor is available at University Park and North Campus.

SOW 3113	The Social Environment and Human Behavior I	3
SOW 3122	The Social Environment and Human Behavior II	3
SOW 3232	Social Welfare Policy and Services I	3
SOW 3233	Social Welfare Policy and Services II	3
SOW 3302	Introduction to Social Work[1]	3
SOW 3350	Techniques of Interviewing	3
SOW 3313	Methods of Social Work Practice I	3
SOW 3801	Self-Awareness and Self-Modification for Practice	3
SOW 4272	Social Welfare: Cross-Culture Comparisons	3
SOW 4361	Behavioral Approaches to Social Work Practice	3
SOW 4654	Child Welfare	3
SOW 4658	Permanency Planning in Child Welfare Services	3
SOW 4684	Professional Values in the Human Services	3
SOW 5109	Crises in the Lives of Women	3
SOW 5605	Medical Social Work	3
SOW 5641	Understanding the Processes of Aging	3
SOW 5665	Animal Assisted Treatment for Social Work	3
SOW 5689	Social Work Practice with Sexual Problems	3
SOW 5710	Chemical Dependency and Social Work	3
SOW 5932	Seminar in Social Work	3
URS 3005	Service Learning: Social Change and Contemporary Social Issues	3

[1]This course is required for the minor in social welfare. The remaining 12 semester hours are to be selected from the social work courses listed above.

Course Descriptions

Definition of Prefixes

SOW - Social Work.
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

SOW 3113 The Social Environment and Human Behavior I (3). Study of the socio-cultural factors (including racial, ethnic, and gender and sexual orientation variables) affecting human development and behavior in families, groups, organizations, and communities. Prerequisites: College level biology (including coverage of human biology). (F)

SOW 3122 The Social Environment and Human Behavior II (3). Study of individual development, personality, and behavior from a bio-psychological and sociocultural perspective with emphasis on the life cycle, giving attention to racial/ethnic, gender and sexual orientation variables. Prerequisites: SOW 3113 or equivalent, and one college-level course in biology (including coverage of human biology). (S)

SOW 3232 Social Welfare Policy and Services I (3). This course considers the major social welfare programs in the United States: how they emerged and developed, and how they operate today. Analysis of financial resources, decision-making processes, and structure of delivery systems serves as a basis for understanding policy assessment. Corequisite: SOW 3302 or equivalent. (F)

SOW 3233 Social Welfare Policy and Services II (3). This course examines the frameworks and methods used to analyze social welfare policy and programs. Special attention is paid to current policy issues in the Social Welfare system and strategies that can be used to achieve policy change. Prerequisites: SOW 3232 and SOW 3302 or equivalent. (S)

SOW 3302 Introduction to Social Work (3). An overview of the profession of social work within the institution of social welfare. Historical and philosophical development, field of practice, values, and ethics. (F,S,)

SOW 3313 Methods of Social Work Practice I (3). An overview of social work intervention for beginning generalist practice. Generic values, attitudes, processes, and skills in client-worker relationship-building are discussed and analyzed. Case material is utilized to acquaint students with assessment, modes of intervention, goal setting, and implementation. Prerequisites: SOW 3113, SOW 3232, SOW 3302, or equivalents. Corequisite: SOW 3122. (F,S)

SOW 3350 Techniques of Interviewing (3). A competency-based course designed to provide students with basic interviewing skills. Emphasis is on acquisition of interview behavior rather than theory. Audio and videotaping, role-playing, simulations, and micro-counseling training methods will be utilized. Prerequisites: SOW 3113 or permission of the instructor.

SOW 3403 Social Work Research (3). Introduction to the basic language, methods, and skills of scientific research for beginning social work practice. Problem formulation, literature review, definition of variables, sampling, data collection and analysis, and report writing are addressed. Prerequisite: STA 1013 or equivalent. (F,S)

SOW 3801 Self-Awareness and Self-Modification for Practice (3). An experience oriented course directed toward helping students become aware of their own interpersonal processes and how these may influence their skill and effectiveness as professional helping persons. Emphasis is on personal learning.

SOW 4272 Social Welfare: Cross-Culture Comparisons (3). A combination seminar and lecture course in which students will analyze and compare social welfare policy, problems, and programs in various countries. Prerequisite: SOW 3232 or permission of the instructor.

SOW 4322 Methods of Social Work Practice II (3). This generic skills course is designed to provide students with the theories and techniques of social work practice as applied to small groups and families. Prerequisites: SOW 3122, SOW 3233, and SOW 3313, or equivalents. Corequisites: SOW 4511 and SOW 4522. (F,S,SS)

SOW 4332 Methods of Social Work Practice III (3). Provides an understanding of planned change at the community level from a social work perspective, as well as strategies and methods utilized in community organization practice. Identification of generalist skills and prevalent models of groups and community organization in social work practice. Prerequisites: SOW 4322, SOW 4511, SOW 4522. Corequisites: SOW 4512 and SOW 4523.

SOW 4361 Behavioral Approaches to Social Work Practice (3). An introduction to the basics of learning theory as applied to social work settings. A review of principles of cognitive and learning theory applied to generalist practice. Prerequisite: SOW 3113 or permission of the instructor.

SOW 4511 Field Experience I (8). This is the first 315 clock hour supervised social work practice experience in service to individuals, families, groups, and communities. Placement in an agency or institution is for the purpose of gaining a first-hand awareness of needs and behavioral responses, as well as a knowledge base of expectations, responsibilities, and activities involved in the delivery of social services. This experience facilitates the development of beginning generalist social work skills, and a continually growing awareness of self as a helping person. Majors only. Prerequisites: SOW 3122, SOW 3233, SOW 3302, SOW 3313, and SOW 3403, or equivalents. Corequisites: SOW 4322 and SOW 4522. (F,S,SS)

SOW 4512 Field Experience II (8). This second 315 clock hour supervised social work practice experience enables the student to progress toward a higher level of awareness and understanding of needs and behavioral responses. Generic skills are applied more selectively with increasing interest and proficiency in one or more practice areas. This second placement affords the student an opportunity to become a more effective part of the social service delivery system. Majors only. Prerequisites: SOW 4511, SOW 4322, and SOW 4522. Corequisites: SOW 4332 and SOW 4523. (F,S,SS)

SOW 4514 Field Experience III (4 or 8). This third supervised social work practice experience makes it possible for students to sharpen diagnostic skills and to refine planning and implementation of appropriate helping techniques as these relate to individuals, groups, and/or communities. Majors only. Prerequisites: SOW 4332, SOW 4512, and SOW 4523, or their equivalents. (F,S,SS)

SOW 4522 Integrative Field Seminar I (1). This course is a one-hour seminar, to be taken concurrently with SOW 4511 and SOW 4322, designed to analyze the field experience and integrate theory and practice. It provides an arena for students from various settings to come together in order to provide a richer understanding of social services on all levels. Majors only. Prerequisites: SOW 3122, SOW 3233, SOW 3302, SOW 3313, and SOW 3403, or equivalents. Corequisites: SOW 4322 and SOW 4511. (F,S,SS)

SOW 4523 Integrative Field Seminar II (1). This course is a one-hour seminar to be taken concurrently with SOW 4512, designed to analyze the field experience and integrate theory and practice. It provides an arena for students from various settings to come together in order to provide a richer understanding of social services on all levels. Majors only. Prerequisites: SOW 4322, SOW 4511, and SOW 4522, or equivalents. Corequisites: SOW 4332 and SOW 4512. (F,S,SS)

SOW 4654 Child Welfare (3). Theories and models of intervention with children and adolescents will be examined within the context of the family. The main focus of the course will be on the special diagnostic and treatment skills necessary for the effective intervention with this client population. Prerequisites: SOW 3122 and SOW 3313 or permission of the instructor.

SOW 4658 Permanency Planning in Child Welfare Services (3). Emphasis on those practice skills needed for implementing permanent plans for children 'at-risk'. Included are intervention strategies for developing contractual arrangements insuring a child's security. Prerequisites: SOW 3122, SOW 3233, SOW 4322, SOW 4654, or permission of the instructor.

SOW 4684 Professional Values in the Human Services (3). This course is designed to assist students in identifying, exploring, and experiencing the values inherent in professionalism, as they are manifested in the various human service professions. Material will be presented in a didactic and experiential manner with emphasis upon student involvement in the value clarification process. Prerequisite: Senior standing.

SOW 4905 Individual Study (1-9). Individually selected program of supervised study related to specific social work issues. Prerequisite: Permission of the instructor. (F,S,SS)

SOW 4932 Current Topics in Social Work (3). This course presents an extensive examination of current issues and problems in social work. Interventive technology to address these issues will be presented.

SOW 5105 Human Behavior and the Social Environment I (3). Study of individuals and families with emphasis on the analysis of bio-psycho-socio-cultural factors (including racial/ethnic and gender variables) affecting human development and social functioning through the life cycle. Prerequisites: Twelve semester hours of college-level courses in the social and behavioral sciences and one college-level course in biology (including coverage of human biology). (F)

SOW 5109 Crises in the Lives of Women (3). An overview of special experiences in the lives of women which might lead women to seek professional assistance. Topics include pregnancy, rape, abortion, childbirth, sex discrimination, climacteric, widowhood. Prerequisite: Senior or graduate standing.

SOW 5354 Crisis Intervention in Social Work Practice (3). This course examines the etiology, structure, theory, and application of crisis intervention in social work practice. It provides assessment criteria for assignment to this form of treatment and techniques for intervention. Prerequisite: Senior or graduate level practice course, or permission of the instructor.

SOW 5532 Field Practicum I (5). A supervised educational field experience in an agency setting for a minimum of 384-clock hours designed to provide students opportunities to develop and apply generic practice skills in working with individuals, families, groups and communities. Prerequisites: SOW 5105, SOW 5344, SOW 5404, SOW 5235, SOW 5342. Corequisites, SOW 5125 (must be taken as a pre or corequisite), SOW 5324, SOW 5542. (S,SS)

SOW 5605 Medical Social Work (3). Principles of medical social work required in hospitals and communities. Focus on the social worker as part of the health care team, with basic knowledge of medical problems of patients and their families. Prerequisite: Graduate or senior standing.

SOW 5614 Social Work Practice with Persons Affected by Domestic Violence (3). Course prepares students to appropriately identify, assess, and intervene with persons affected by domestic violence utilizing assessment and intervention strategies in practice. Prerequisite: Practicum I/Methods I.

SOW 5621 Social Work with Refugees, Immigrants, and Migrants (3). Provides skills and knowledge responsive to the needs of immigrants and refugees and addresses influences of cultural, ethnic, gender, age, and class differences in acculturation and service delivery. Prerequisite: Practicum I/Methods I.

SOW 5624 Feminist Therapy in Social Work (3). Reviews basic principles of feminist therapy and focuses on the application of feminist therapy in clinical social work practice. Prerequisite: Graduate standing or permission of the instructor.

SOW 5635 School Social Work Practice (3). Designed to assist students in developing knowledge and skills necessary for effective social work practice in school settings. Promotes understanding of social work practice to improve the functioning of children. Prerequisites: SOW 5342 or permission of the instructor.

SOW 5641 Understanding the Process of Aging (3). Study of the physical, psychosocial, and cultural factors affecting human development in late life, from a social work perspective. Prerequisites: Graduate or senior standing and permission of the instructor. (F)

SOW 5665 Animal Assisted Treatment for Social Work (3) An introduction to the human animal bond and animal assisted treatment. There will be illustrations of programs using small animals, horses, and dolphins. Prerequisites: SOW 3313 or SOW 5342 or permission of the instructor.

SOW 5689 Social Work Practice with Sexual Problems (3). Skills applicable to sex-related concerns encountered in social work practice. Presents theories of the etiology of common sexual problems and explores treatment intervention modalities. Prerequisite: Graduate or senior level practice course or permission of the instructor.

SOW 5710 Chemical Dependency and Social Work (3). An overview of chemical dependency in the social service delivery system including policy and program approaches, client assessment, treatment techniques and prevention issues. Prerequisites: SOW 4322 or SOW 5342 or permission of the instructor.

SOW 5932 Seminar in Social Work (3). An exploration of various critical issues of concern to the social work profession. Prerequisite: Graduate or senior standing.

College of Urban and Public Affairs

Dean **Ronald M. Berkman**
Associate Dean **David Bergwall**
Assistant Dean **Welker Mitchell**

Faculty

Albertini, Velmarie, M.S.W. *(Florida International University), Instructor, Student Services Coordinator*

Averch, Harvey, Ph.D. *(University of North Carolina), Professor, Public Administration*

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Koppel, Monte H., Ph.D. *(New School for Social Research), Professor, Social Work*

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Mitchell, Welker, Ph.D. *(Florida International University), Instructor, Social Work and Assistant Dean*

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Patterson, Valerie L., Ph.D. *(Florida International University), Instructor, Public Administration and Assistant Dean*

Pelaez, Martha, Ph.D. *(Tulane University), Senior Lecturer, Health Services Administration, Associate Director, Southeast Florida Center on Aging*

Potocky-Tripodi, Miriam, Ph.D. *(University of Kansas), Associate Professor and Acting Coordinator, Ph.D. Program, Social Work*

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Revell, Keith D., Ph.D. *(University of Virginia), Assistant Professor, Public Administration*

Rosenbaum, Allan, Ph.D. *(University of Chicago), Professor, Public Administration*

Rothman, Max, J.D., LLM *(George Washington University), Senior Lecturer, Health Services Administration and Acting Director, Social Work*

Salas, Luis P., J.D. *(Wake Forest University), Professor, Criminal Justice*

Shearn, Regina B., Ph.D. *(Florida State University), Associate Professor, Criminal Justice*

Smith, Betsy A., Ph.D. *(State University of New York at Buffalo), Associate Professor, Social Work*

Snow, Robert E., J.D. *(Florida State University), Associate Professor, Criminal Justice*

Stolzenberg, Lisa, Ph.D. *(Florida State University), Assistant Professor, Criminal Justice*

Sundel, Martin, Ph.D. *(University of Michigan), Professor, Social Work*

Terry, W. Clinton, Ph.D. *(University of California), Associate Professor, Criminal Justice*

Thomlison, Barbara, Ph.D. *(University of Toronto), Visiting Professor and Acting Director, Institute for Children and Families At Risk, Social Work*

Thomlison, Ray, Ph.D. *(University of Toronto), Professor and Director, Social Work*

Threadgill, Norma, Ph.D. *(Florida International University), Visiting Professor, Social Work*

Vardalis, James, D.P.A. *(Nova University), Associate Professor, Criminal Justice*

Verdi, Michele, M.S.W. *(Florida International University), Instructor and Acting Director of Field Practicum, Social Work*

Wagner, Eric F., Ph.D. *(University of Pittsburgh), Associate Professor, Social Work, Director, Teen Intervention Project*

White, Vandon E., Ph.D. *(Purdue University), Professor, Health Services Administration*

Wong, Sydney, Ph.D. *(University of California) Associate Professor, Public Administration*
Yarnold, Barbara, Ph.D. *(University of Illinois),* **J.D.** *(DePaul University), Associate Professor, Public Administration*

The Honors College

Fernando Gonzalez-Reigosa, *Dean*
Stephen M. Fjellman, *Associate Dean*
Caryl Myers Grof, *Assistant Dean*
Sharon Placide, *Coordinator of Student Services*

Talented students often are forced to choose between the exciting opportunities and challenges offered by large, research-oriented universities and the close, personal environment offered by small liberal arts colleges. FIU offers the best of both worlds. The Honors College is a small community of dedicated scholars—outstanding students and committed teachers—who work together in an atmosphere usually associated with small private colleges, but they do so with all of the resources of a major state university readily at hand.

The College provides an important foundation for students who want to get the most out of their undergraduate years. Transition into higher education is made easier by the student's immediate association with a small group of students and teachers with similar capabilities and aspirations. The undergraduate experience is significantly enhanced by the broad liberal arts focus of the curriculum and the opportunity to work closely with experienced faculty from the first day on campus; and the opportunities for graduate and professional study or employment are greatly expanded because of the range of activities and experiences made available to students in the College. The Honors College at FIU offers the very best in undergraduate education.

Location

The Honors College Program is available at both University Park and the North Campus.

Admission Policy

Admission to The Honors College is selective and limited. Students are admitted only at the beginning of each academic year (fall term).

Freshmen: Students with a 3.5 overall high school GPA and commensurate scores on the SAT or ACT are eligible for admission to the College.

Transfer and Continuing FIU Students: Students who have maintained a 3.3 GPA in all college-level work are eligible for admission to the College. To be eligible for admission, students must have at least two full academic years remaining in their undergraduate programs.

Graduation Policy

Students are eligible for a transcript notation indicating that they "*Graduated Through The Honors College*" if they have completed with the following requirements:

1. met all other requirements for graduation from the University;
2. were continuously enrolled in honors seminars;
3. completed at least 12 credits of honors courses with no grade lower than "B;"
4. maintained an overall GPA of at least 3.3.

The Honors Curriculum

Students in the College possess dual academic citizenship. They pursue any major available in the University and at the same time complete the honors curriculum. In most cases, participation in the College does not increase the number of credits required for graduation. Each term through the third year, students enroll in one honors seminar that is designed to stimulate thoughtful discussion and creativity and to develop communication skills. Honors seminars are limited to a student/faculty ratio of 20:1 and are taught by some of the best teachers in the University. In the senior year, students may choose from several options including additional seminars, independent research, and foreign study.

All classes are interdisciplinary; most are team-taught. Years I-III are structured similarly: all students and faculty at each level meet in a large group session one day each week for activities such as lectures, panel discussions, case studies, and student presentations; the other class meeting each week is spent in small group preceptorials. Professors meet with the same small group throughout the year. Senior seminars meet as independent classes with an emphasis on synthesizing the students' experiences during the previous three years and introducing them to graduate level research activities.

The curriculum emphasizes the following activities:

- Critical, integrative, and creative thinking;
- Group and independent research;
- Oral presentation;
- Close contact between students and faculty;
- Integration of class work with the broader community.

Year One

IDH 1001, IDH 1002 The Origin of Ideas and the Idea of Origins (6). The course is designed to encourage students to become self-conscious learners, exploring not only the what, but also the how and why of knowing. The course focuses on the nature of truth and reality and our role in the world each of us has constructed.

Year Two

IDH 2003, IDH 2004 Inhabiting Other Lives (6). Exposes students to issues of cultural commonality and diversity, and invites them to investigate and to understand the interconnectedness of various cultures.

Year Three

IDH 3005, IDH 3006 Aesthetics, Values, and Authority (6). Building on the investigations of the first two years, the third course examines the aesthetic underpinnings of culture and foundations of what commonly are held to be "western values." Discussions focus not only on these paradigms, but on the authority and power relationships that surround them.

Year Four

Prerequisites

1. admission to The Honors College;
2. no grade below "B" in prior honors course work;
3. and a cumulative GPA of at least 3.3.

(these requirements may be appealed in writing to the Dean of the Honors College)

Option 1

IDH 4007, IDH 4008 Looking to the Future (6). Discussion of contemporary issues within the framework provided by the first three years of study.

Option 2

Departmental Honors Requirements—Honors course work or honors thesis opportunities offered by individual departments;

Option 3

Independent Study—Individual research projects under the direction of a faculty member from the student's major department;

Option 4

Foreign Study

Students may choose to complete the fourth year of the honors curriculum at

one of the College's summer study programs abroad. During the summer of 1998 programs are planned in Spain, Italy, and England.

National Student Exchange

This program enables students in the College to spend one semester or a full year at any one of more than 145 universities throughout the United States and its territories.

The Honors College Society

Open to all Honors College students, the Honors College Society moves the honors experience beyond the classroom by organizing social and cultural activities and community service projects. The Society plans picnics and parties and the annual honors awards night, and in recent years has coordinated volunteer activities with various local community-service groups.

Mentoring

For students in the College, the facilities and programs available at the University, extensive as they might be, are only the beginning. The faculty and staff of the College feel a personal responsibility to see that every student is aware of and prepared for the many fellowship and internship opportunities available to undergraduate students. It is not uncommon for Honors College students to be involved in some sort of funded off-campus activity during each summer of their undergraduate careers.

Graduate and Professional School Placement

The College provides placement assistance in two very important ways. The staff is knowledgeable and eager to help students find out about graduate and professional programs and the application process. More importantly, however, students who have completed the honors curriculum will have participated in a small seminar with a number of faculty members who will be able to offer guidance to the students and personal, detailed evaluation in support of their applications.

Other Privileges

Because of the special nature of their contribution to the university, Honors College students enjoy other privileges as well, including, priority registration, special dormitory facilities, opportunities for scholarships and fee waivers, assistance in finding on-campus employment, and special recognition at commencement ceremonies.

Pre-Collegiate Summer Institute

The Summer Institute offers high school students the opportunity to attend college classes during the summer prior to their senior year. Acceptance into the Institute includes a scholarship for 6 credits, which covers tuition, registration fees, and textbooks. The Institute may enable students to graduate from college in under four years. Any credits earned will count toward graduation from FIU and are transferable to other universities. Students also may arrange to apply these credits toward high school graduation.

Students who successfuly complete the Summer Institute are guaranteed priority consideration for admission into The Honors College.

The Honors College Faculty

Bailey, Regina, M.FA. *(Pratt Institute)*, Associate Director, The Art Museum

Baker, Edward T., MLA, Mdes, ASLA, *(Harvard University)*, Assistant Professor, Landscape Architecture

Beesting, William, Ph.D. *(Florida State University)*, Assistant Dean, Undergraduate Studies

Carvajal, Manuel, Ph.D. *(University of Florida)*, Professor, Economics

Castells, Ricardo, Ph.D. *(Duke University)*, Associate Professor, Modern Languages

DeFrancesco, Charmaine, Ph.D. *(Florida State University)*, Associate Professor, Movement Science, Health, Physical Education & Recreation

Elkins, Mary Jane, Ph.D. *(Southern Illinois University)*, Associate Professor, English

Fjellman, Stephen, Ph.D. *(Stanford University)*, Professor and Chairperson, Sociology/Anthropology and Associate Dean

Gonzalez-Reigosa, Fernando, Ph.D. *(Florida State University)*, Associate Professor, Psychology and Humanities and Dean

Grof, Caryl, M.S. *(Florida International University)*, Assistant Dean, The Honors College

Hogner, Robert, Ph.D. *(University of Pittsburgh)*, Associate Professor, Marketing and Business Environment

Keppler, William, Ph.D. *(University of Illinois)*, Professor, Public Health

Kneski, John, M., Archll *(Syracuse University)*, Visiting Assistant Professor, School Coordinator, School of Architecture

Koptur, Suzanne, Ph.D. *(University of California)*, Associate Professor, Biological Sciences

Levine, Barry, Ph.D. *(New School for Social Research)*, Professor, Sociology/Anthropology

Machonis, Peter, Ph.D. *(Pennsylvania State University)*, Associate Professor, Modern Languages

Moncarz, Raul, Ph.D. *(Florida State University)*, Professor, Finance

Nelson, Brian, Ph.D. *(University of California)*, Associate Professor, Political Science

Rochelson, Meri-Jane, Ph.D. *(University of Chicago)*, Associate Professor, English

Schwartz, Richard, Ph. D. *(University of Chicago)*, Associate Professor, English

Tracey, Martin, Ph.D. *(Brown University)*, Professor, Biology

Military Science

Robert Knotts, *Professor and Chairperson, Military Science*
Jose A. Torres, *Executive Officer*
Mark Weir, *Assistant Professor*
Rumi Nielson-Green, *Scholarhsip/ Enrollment Officer*
Jeffery LaCaze, *Assistant Professor*
Albert Nowak, *Instructor*

The Army Reserve Officer Training Corps is a college elective that will help students succeed in their desired career, whether civilian or military. Students who complete all ROTC requirements may be commissioned second lieutenants and serve in the Army, Army National Guard or Army Reserve.

Enrollment

Open to full-time male and female students attending Florida International University.

Instruction and Training

Freshmen and sophomores take Basic Military Science Courses. There is no military obligation associated with the first two years of the program. These courses introduce students to skills taught at U.S. Army Basic Combat Training. These include rappelling, patrolling, weapons handling and firing, map reading, first aid and many others. Courses consist of outdoor/indoor instruction and practical 'hands-on' training on university intramural fields and South Florida military sites. Juniors and seniors continue to use these 'hands-on' techniques while developing leadership skills. As upper classmen they will have opportunities to teach underclassmen.

Scholarships

Army ROTC offers a number of scholarships that pay most tuition and fees, an allowance for books and spending money.

Organizations

Ranger Challenge - A physically demanding course designed to prepare cadets for area and regional competition against other ROTC units. Cadets train weekly to perfect skills in weapons handling and assembly, marksmanship, orienteering, hand grenade throwing, physical fitness, combat patrolling and combat load roadmarching.

Scabbard and Blade - An honor society for outstanding cadets selected for membership by their peers for academic and military excellence.

Color Guard - An elite organization of cadets skilled in marching and drill and ceremony. Members post the colors at Golden Panther basketball games, civic/veteran events and campus functions.

Association of the U.S. Army - A fraternal organization chartered by the national association to perpetuate the ideals of the U.S. Army.

Special Programs

Students unable to participate in ROTC during their freshman and sophomore years may qualify for admission to advanced ROTC (junior and senior years) by attending a five-week course at Ft. Knox, KY. Attendees receive $600-$800 plus travel costs, lodging and food.

Students who want to pursue an advanced degree after receiving a baccalaureate may qualify for delayed entry on active duty.

Students interested in pursuing civilian careers after graduation may apply for duty in the National Guard or Reserve.

Special Training

Outstanding cadets may qualify to attend special Army schools such as Mountain Warfare Training, Northern Warfare School, Air Assault School or Airborne School. Selection is on a competitive basis.

Cadets receive uniforms, shoes, boots and other equipment necessary for training. Outstanding cadets are honored at frequent award ceremonies. Scholarship cadets can fly space-available aboard military aircraft. Once commissioned, second lieutenants earn about $35,000 a year in the Army as a starting salary, or about $3,500 per year in the National Guard or Reserve.

Course Descriptions

MIS 1002 First Year Basic (2). An orientation of the ROTC program and its objectives; the role and organization of the Army; the fundamentals of leadership and management; leadership development.

MIS 1300 First Year Basic (2). Basic operations and tactics of Infantry and Mechanized Infantry as small unit level; military principles of war.

MIS 2106 Second Year Basic (2) MIS 2106L Second Year Basic Laboratory (0). Basic military skills in radio communication procedures; US and opposing forces Armor and Anti-Armor capabilities; security and intelligence reporting; nuclear, biological, and chemical battlefield; US Artillery weapons; and basic first aid. Required laboratory, field training, and/or activity module participation.

MIS 2333 Second Year Basic (2) MIS 2333L Second Year Basic Laboratory (0). Map reading skills, determining distance, direction, and location; analysis of terrain; and indirect fires. Required Laboratory, Field Training, and/or Activity Module.

MIS 3310 Advanced Military Science III (3). MIS 3310L Advanced Military Science III Laboratory (0). Advanced leadership and troop command procedures. Small unit tactics and communications. Map and compass skill. Patrolling, tactical operations. Required Leadership Laboratory. Prerequisite: Permission of the PMS.

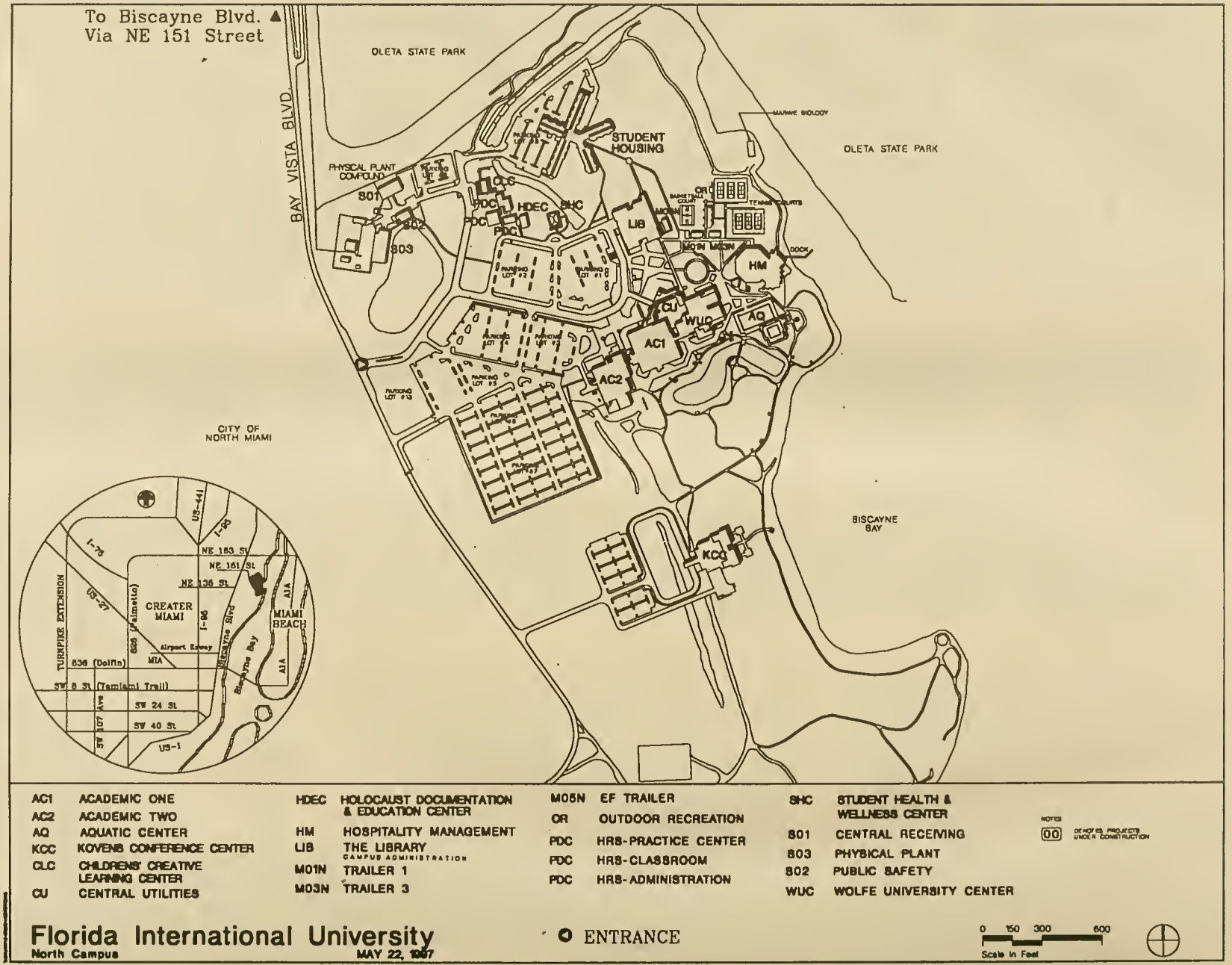
MIS 3423 Advanced Military Science III (3). MIS 3423L Advanced Military Science III Laboratory (0). Management and leadership. Case studies in fact finding, decision making, planning, delegation, and interpersonal skills. Motivation training with emphasis on crisis-oriented organizations. Required Laboratory. Prerequisite: Permission of the PMS.

MIS 4120 Advanced Military Science IV (3). Ethics and professionalism responsibilities of the military officer. The military law and justice system. The laws of war. Prerequisite: Permission of the PMS.

MIS 4410 Advanced Military Science IV (3). The applied leadership techniques in counseling subordinates; written and oral communications; the command, staff, personnel, logistics, and training management systems; the role of NCO's.

MIS 4411 Studies in Military History (1-3). Supervised readings and independent studiy in Military History.

MIS 4905 Studies in Military History (1-3). Supervised readings and independent study in Military History. Prerequisite: Permission of the instructor.



AC1	ACADEMIC ONE	HDEC	HOLOCAUST DOCUMENTATION & EDUCATION CENTER	M05N	EF TRAILER	SHC	STUDENT HEALTH & WELLNESS CENTER
AC2	ACADEMIC TWO	HM	HOSPITALITY MANAGEMENT	OR	OUTDOOR RECREATION	S01	CENTRAL RECEIVING
AQ	AQUATIC CENTER	LIB	THE LIBRARY CAMPUS ADMINISTRATION	PDC	HRS-PRACTICE CENTER	S03	PHYSICAL PLANT
KCC	KOVENS CONFERENCE CENTER	M01N	TRAILER 1	PDC	HRS-CLASSROOM	S02	PUBLIC SAFETY
CLC	CHILDRENS' CREATIVE LEARNING CENTER	M03N	TRAILER 3	PDC	HRS-ADMINISTRATION	WUC	WOLFE UNIVERSITY CENTER
CU	CENTRAL UTILITIES						

NOTES: 00 DENOTES PROJECTS UNDER CONSTRUCTION

Florida International University

North Campus

MAY 22, 1987

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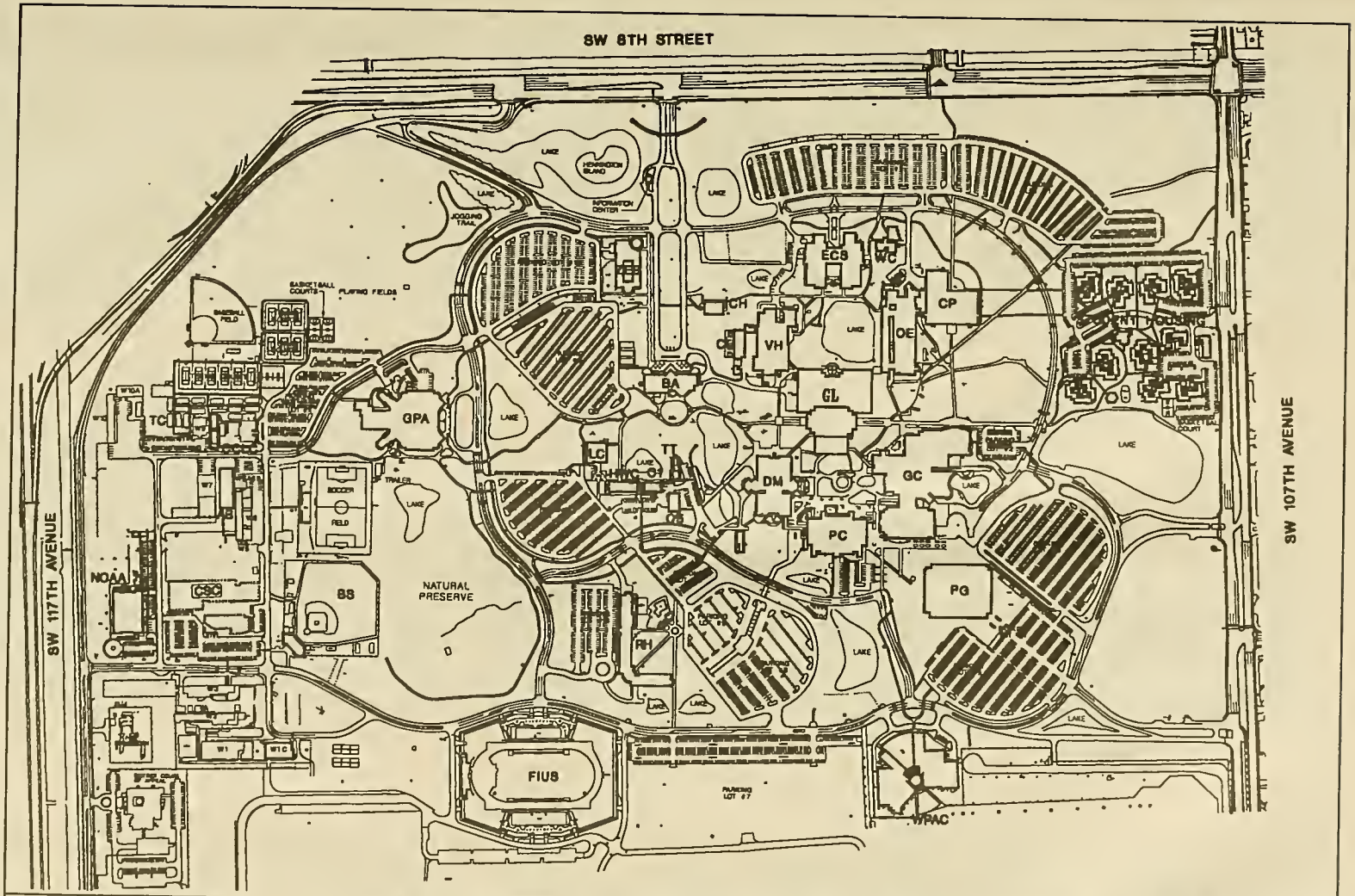
Scale in Feet



AB	AUXILIARY BUILDING	CP	CHEMISTRY & PHYSICS	GPA	GOLDEN PANTHER ARENA	PG	PARKING GARAGE	WPAC	WERTHEIM PERFORMING ARTS CENTER
BA	BUSINESS ADMINISTRATION	CU	CENTRAL UTILITIES	HWC	STUDENT HEALTH & WELLNESS CENTER	RH	RESIDENCE HALL	ZEB	ZIFF EDUCATION BUILDING
BS	BASEBALL STADIUM	DM	DEUXIEME MAISON	LC	LABOR CENTER	TC	TRAILER COMPLEX	CSC	CAMPUS SUPPORT COMPLEX
C1	TOWER PUBLIC SAFETY	ECS	ENGINEERING & COMPUTER SCIENCE	NOAA	NATIONAL HURRICANE CENTER	TT	TOWER TRAILER		
C5	DUPLICATING CENTER	FIUS	FIU STADIUM	OE	OWA EHAN	VH	VIERTES HAUS		
CCLC	CHILDREN'S CREATIVE LEARNING CENTER	GC	ERNEST R. GRAHAM CENTER	PC	CHARLES E. PERRY	WC	WERTHEIM CONSERVATORY		
CH	COLLEGE OF HEALTH	GL	GREEN LIBRARY						

NOTES

00 DENOTES PROJECTS UNDER CONSTRUCTION

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Scale in Feet

Florida International University

University Park

SEPTEMBER 21, 1998

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